TM 11-5820-759-35

TECHNICAL MANUAL

DS, GS, AND DEPOT MAINTENANCE MANUAL
FOR

RADIO SET AN/GRC-165
AND CONTROL,
RADIO SET C-7648/GRC-165

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WARNING

Voltages up to 1035 Vac, 230 Vac, and up to +800 Vdc exist in the Receiver-Transmitter, Radio RT–902/GRC–165. DEATH ON CONTACT may result if maintenance personnel fail to observe safety precautions. Don't take chances!

WARNING

Never operate the rt unit without a rf load; a lethal shock hazard and damage to equipment will result.

CAUTION

Do not key Receiver-Transmitter, Radio RT–902/GRC–165 for extended periods during maintenance testing with the covers removed. Provide external cooling to the pa. stage.

CAUTION

Do not make resistance measurements in transistorized circuits of the equipment, except as specified; the voltages present in the ohmmeter may destroy transistors.

CHANGE
No. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., *22 November 1972*

Direct Support, General Support, and Depot Maintenance Manual Including Repair Parts and Special Tools Lists

RADIO SET AN/GRC-165 AND CONTROL,

RADIO SET C-7648/GRC 165

TM 11-5820-759-35, 9 February 1971, is changed as follows:

1. The title of the manual is changed as shown above.

2. New or changed material is indicated by a vertical bar.

3. Remove old pages and insert new pages as indicated below.

Remove pages—	*Insert pages—*
i, ii	i, ii
A-1, A-2	A-1, A-2
B-11, B-12	B-11, B-12

4. File this change sheet in front of the manual for reference purposes.

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ARNG & USAR: None.

For explanation of abbreviations used, see AR 310-50.

TECHNICAL MANUAL
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HEADQUARTERS
DEPARTMENT OF THE ARMY
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Direct Support, General Support, and Depot Maintenance Manual
Including Repair Parts and Special Tools Lists

RADIO SET AN/GRC-165 AND CONTROL, RADIO SET C-7648/GRC-165

			Paragraph	Page
CHAPTER 1.		FUNCTIONING		
Section	I.	System Functioning	1-1/1-6	1-1/1-2
	II.	Receiver-Transmitter, Radio RT-902/GRC-165, block diagram	1-7/1-11	1-2/1-6
	III.	Receiver-Transmitter, Radio RT-902/GRC-165, circuit analysis	1-12/1-31	1-6/1-25
	IV.	Functioning of Antenna Coupler CU-1782/GRC-165	1-32/1-36	1-25/1-26
	V.	Functioning of Control, Radio Set C-7648/GRC-165	1-37/1-40	1-26
CHAPTER 2.		DIRECT AND GENERAL SUPPORT MAINTENANCE		
Section	I.	Direct Support Troubleshooting	2-1/2-3	2-1/2-2
	II.	Rt Unit Troubleshooting	2-4/2-5	2-2
	III.	Antenna Coupler Troubleshooting	2-6/2-7	2-13
	IV.	Remote Control Troubleshooting	2-8/2-9	2-13
	V.	General Support Maintenance	2-10/2-16	2-14/2-32
	VI.	General Support Alignment Procedures	2-17/2-26	2-32/2-38
CHAPTER 3.		DEPOT MAINTENANCE RECEIVER-TRANSMITTER, RADIO RT-902/GRC-165	3-1/3-27	3-1/3-64
	4.	DEPOT MAINTENANCE COUPLER, ANTENNA CU-1782/GRC-165	4-1/47	4-1/4-7
	5.	DEPOT MAINTENANCE CONTROL, RADIO SET C-7648/GRC-165	5-1/5-8	5-1/5-4
	6.	DEPOT TESTING	6-1/6-10	6-1/6-9
APPENDIX	A	REFERENCES		A-1
	B	DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINENANCE REPAIR PARTS AND SPECIAL TOOLS LIST		B-1
Index				I-1

LIST OF ILLUSTRATIONS

Figure No.	Caption	Page
1-1	Radio Set AN/GRM-165 and Control, Radio Set C-7648/GRC-165 functional relationship	1-1
1-2	Receiver-Transmitter, Radio RT-902/GRC-165 receive mode block diagram	1-3
1-3	Receiver-Transmitter, Radio RT-902/GRC-165 transmit mode block diagram	1-3
1-4	Frequency conversion scheme block diagram	1-5
1-5	Amplifier-Limiter, 1A5, schematic diagram	1-10
1-6	Rf oscillator 1A9, schematic diagram	1-15
1-7	Rf oscillator 1A10, schematic diagram	1-16
1-8	Rf oscillator 1A11, schematic diagram	1-17
1-9	Rf oscillator 1A12, schematic diagram	1-18
1-10	Rf oscillator 1A13, schematic diagram	1-19
1-11	Amplifier-Limiter 1A14, schematic diagram	1-20
1-12	Amplifier-Limiter 1A15, schematic diagram	1-21
1-13	Af Amplifier 1A16, schematic diagram	1-22
1-14	Electronic chopper 1A18A, CV-2487/URC, schematic diagram	1-23
1-15	Electronic chopper 1A18B, CV-2486/URC, schematic diagram	1-24
2-1	Receiver-Transmitter, Radio RT-902/GRC-165, receive and transmit test setups	2-4
2-2(1)	Receiver-Transmitter, Radio RT-902/GRC-165 top view	2-15
2-2(2)	Receiver-Transmitter, Radio RT-902/GRC-165 top view	2-16
2-3	Receiver-Transmitter, Radio RT-902/GRC-165 bottom view	2-17
2-4	Receiver-Transmitter, Radio RT-902/GRC-165 right side view	2-19
2-5	Electronic Chopper 1A18B CV-2486/URC, or 1A18A CV-2487/URC installation	2-23
2-6	Rt unit pa. section	2-25
2-7	Coupler, Antenna CU-1782/GRC-165 right side view	2-26
2-8	Control, Radio Set C-7648/GRC-165 top view	2-27
2-9	Synthesizer 1A2 test point location	2-34
2-10	Transistor 1A2Q1 collector waveform	2-35
2-11	Transistor 1A2Q16 base waveform	2-35
2-12	Transistor 1A2Q9 collector waveform	2-35
2-13	Transistor 1A2Q13 collector waveform	2-35
3-1	Test connectors, atenuators, and loads, fabrication	3-2
3-2	Receive/transmit relay switching test setup	3-6
3-3	Rf amplifier 1A1 test setup	3-9
3-4	Rf amplifier 1A1 subassembly and component locations	3-10
3-5	Rf amplifier 1A1 band switch 1A1S1	3-11
3-6(1)	Subassemblies 1A1A1 through 1A1A6 component locations	3-12
3-6(2)	Subassemblies 1A1A1 through 1A1A6 component locations	3-13
3-7	Relay 7A1K1	3-14
3-8	ME-26A/U test setup connections	3-17
3-9	Synthesizer 1A2 test setup	3-19
3-10	Synthesizer 1A2 component locations and printed wiring	3-20
3-11	Transistor 1A2Q1 collector waveform	3-21
3-12	Transistor 1A2Q16 base waveform	3-21
3-13	Transistor 1A2Q9 collector waveform	3-21
3-14	Transistor 1A2Q13 collector waveform	3-22
3-15	Frequency mixer 1A3 test setup	3-23
3-16	Frequency mixer 1A3 component locations and printed wiring	3-24
3-17	Frequency mixer 1A4 test setup	3-26
3-18	Frequency mixer 1A4 component locations and printed wiring	3-27
3-19	Limiter 1A5 test setup	3-30
3-20	Limiter 1A5 component locations and printed wiring	3-30
3-21	Translator 1A6 test setup	3-31
3-22	Translator 1A6 component locations and printed wiring	3-32
3-23	If. amplifier 1A7 test setup	3-34
3-24	If. amplifier 1A7 component locations and printed wiring	3-35
3-25	Frequency mixer 1A8 test setup	3-36
3-26	Frequency mixer 1A8 component locations and printed wiring	3-38
3-27	Rf oscillator 1A9 test setup	3-39
3-28	Rf oscillator 1A9 component locations and printed wiring	3-40

LIST OF ILLUSTRATIONS—Continued

Figure No.	Caption	Page
3-29	Rf oscillator 1A10 test setup	3-41
3-30	Rf oscillator 1A10 component locations and printed wiring	3-42
3-31	Rf oscillator 1A10 exploded view	3-43
3-32	Rf oscillator 1A11 test setup	3-44
3-33	Rf oscillator 1A11 component locations and printed wiring	3-45
3-34	Rf oscillator 1A11 exploded view	3-46
3-35	Rf oscillator 1A12 test setup	3-47
3-36	Rf oscillator 1A12 component locations and printed wiring	3-48
3-37	Rf oscillator 1A12 exploded view	3-49
3-38	Rf oscillator 1A13 test setup	3-50
3-39	Rf oscillator 1A13 component locations and printed wiring	3-51
3-40	Rf oscillator 1A13 exploded view	3-52
3-41	Limiter 1A14 test setup	3-53
3-42	Limiter 1A14 component locations and printed wiring	3-54
3-43	Limiter 1A15 test setup	3-54
3-44	Limiter 1A15 component locations and printed wiring	3-55
3-45	Af amplifier 1A16 test setup	3-55
3-46	Af amplifier 1A16 component locations and printed wiring	3-56
3-47	Rf oscillator 1A17 test setup	3-56
3-48	Rf oscillator 1A17 pin locations (bottom view)	3-57
3-49	Chopper 1A18 test setup	3-57
3-50(1)	Chopper 1A18B (CV-2486/URC) component locations	3-58
3-50(2)	Chopper 1A18B (CV-2486/URC) component locations	3-59
3-51(1)	Chopper 1A18A (CV-2487/URC) component locations	3-60
3-51(2)	Chopper 1A18A (CV-2487/URC) component locations	3-61
3-52	Filter assembly 1A19 test setup	3-62
3-53	Filter assembly 1A19 component locations and test equipment connection points	3-62
3-54	Speed decreaser gear assembly 1MP70 exploded view	3-63
3-55	Speed decreaser gear assembly 1MP71 exploded view	3-65
4-1	Coupler, Antenna CU-1782/GRC-165 test setup	4-2
4-2	SWR bridge 2A1 test setup	4-2
4-3	SWR bridge 2A1 component locations	4-3
4-4(1)	Coupler, Antenna, CU-1782/GRC-165 component locations	4-5
4-4(2)	Coupler, Antenna CU-1782/GRC component locations	4-6
5-1	Test connectors, fabrication	5-1
5-2	Control, Radio Set C-7648/GRC-165 test setup	5-2
5-3	Transformer assembly A2 component locations	5-3
5-4	Transformer assembly A2 test setup	5-4
6-1	Test connectors and attenuators, fabrication	6-2
6-2	Receiver-Transmitter, Radio RT-902/GRC-165 audio distortion test	6-3
6-3	Receiver-Transmitter, Radio RT-902/GRC-165 stability test	6-4
6-4	Receiver-Transmitter, Radio RT-902/GRC-165 selectivity test	6-5
6-5	Receiver-Transmitter, Radio RT-902/GRC-165 undesired sideband suppression test	6-6
6-6	Receiver-Transmitter, Radio RT-902/GRC-165 spurious emission test	6-7
6-7	Coupler, Antenna CU-1782/GRC-165 transmission line impedance test	6-8
6-8	Control, Radio Set C-7648/GRC-165 audio amplifier noise and distortion test	6-9
6-9	Color code marking for MIL-STD capacitors, inductors, and resistors	6-9
6-10	Rf amplifier 1A1 removal	6-9
6-11(1)	Rf amplifier 1A1, exploded view	6-9
6-11(2)	Rf amplifier 1A1, exploded view	6-9
6-12(1)	Receiver-Transmitter, Radio RT-902/GRC-165, main frame schematic diagram	6-9
6-12(2)	Receiver-Transmitter, Radio RT-902/GRC-165, main frame schematic diagram	6-9
6-13	Rf amplifier, 1A1 schematic diagram	6-9
6-14	Synthesizer, electrical frequency 1A2, schematic diagram	6-9
6-15	Mixer, stage, frequency, 1A3 schematic diagram	6-9
6-16	Mixer, stage, frequency, 1A9 schematic diagram	6-9

LIST OF ILLUSTRATIONS—Continued

Figure No.	Caption	Page
6–17	Translator, signal data, 1A6 schematic diagram	6–9
6–18	If. amplifier, 1A7 schematic diagram	6–9
6–19	Mixer, stage, frequency, 1A8 schematic diagram	6–9
6–20	Antenna coupler, CU–1782/GRC–165, schematic diagram	6–9
6–21	Control, Radio Set C–7648/GRC–165, schematic diagram	6–9

CHAPTER 1

FUNCTIONING

Section I. SYSTEM FUNCTIONING

1–1. Scope

a. This manual contains instructions for direct support (DS), general support (GS), and depot maintenance of Radio Set AN/GRC–165, and Control, Radio Set C–7648/GRC–165. It includes instructions appropriate for troubleshooting, testing, aligning, and repair by maintenance personnel for Radio Set AN/GRC–165 and Control, Radio Set C–7648/GRC–165. It also lists tools, materials, and test equipment required for each maintenance category.

b. The complete technical manual for this equipment includes TM 11–5820–759–12 and TM 11–5820–759–35P.

1–2. Indexes of Publications

a. DA Pam 310–4. Refer to the latest issue of DA Pam 310–4 to determine whether there are new editions, changes, or additional publications pertaining to the equipment.

b. DA Pam 310–7. Refer to DA Pam 310–7 to determine whether there are modification work orders (MWO's) pertaining to the equipment.

1–3. Reporting of Equipment Manual Improvements

Report of errors, omissions, and recommendations for improving this equipment manual by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to DA Publications) and forwarded direct to Commanding General, U.S. Army Electronics Command, ATTN: AMSEL–ME–NMP–EM, Fort Monmouth, NJ 07703.

1–4. General Block Diagram (fig. 1–1)

Figure 1–1 shows the functional relationship of the units comprising Radio Set AN/GRC–165 (radio set) and Control, Radio Set C–7648/GRC–165 (remote control), while paragraphs 1–8 through 1–11 describe with additional block diagrams the interrelated operation of the units during the transmit and receive modes.

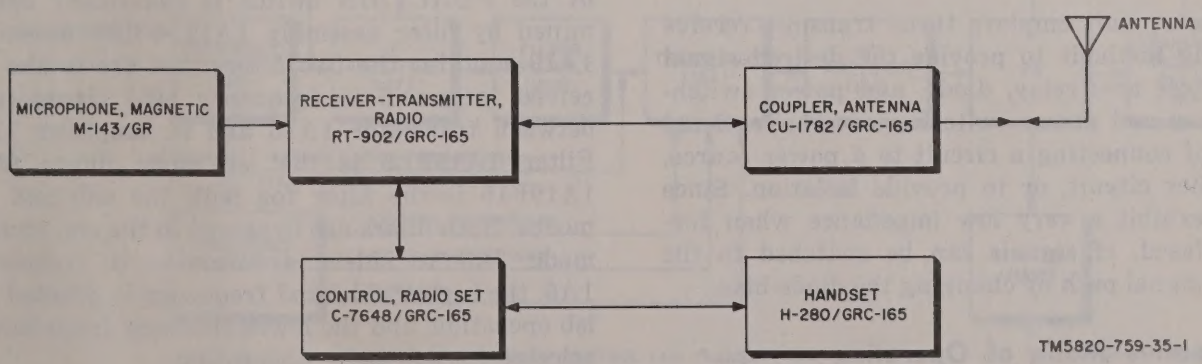


Figure 1–1. Radio Set AN/GRC–165 and Control, Radio Set C–7648/GRC–165 functional relationship.

1–5. Transmit Mode
(fig. 1–1)

When transmitting at the desired operating frequency in the selected operating mode, rf energy originates in the Receiver-Transmitter, Radio RT–902/GRC–165 (rt unit) and is power amplified to a level of 100 watts. This rf power is then applied to the Coupler, Antenna CU–1782 GRC–165 (antenna coupler) which matches antenna impedance to the transmission line and minimizes reflected power. Transmission is effected by a microphone, handset, or handkey at either the rt unit or the remote control.

1–6. Receive Mode
(fig. 1–1)

When the rt unit is in the receive mode, incoming signals from the antenna are coupled through the antenna coupler to the rt unit. In the rt unit, only the radio frequency (rf) signals at the operating frequency are admitted. The audio signal is then detected from the received rf signal and amplified. Audio output selection enables monitoring of the transmission by the rt unit speaker, headset, remote control speaker, or remote control handset.

Section II. RECEIVER-TRANSMITTER, RADIO RT–902/GRC–165 BLOCK DIAGRAMS

1–7. General

This section contains a block diagram description of the rt unit functions. Paragraph 1–8 contains an overall description of the rt unit and the transmit/receive switching methods employed. Receive and transmit modes of operation are described in paragraphs 1–9 and 1–10. The frequency conversion process is described in paragraph 1–11.

1–8. Rt Unit Description

a. The rt unit is a triple conversion superheterodyne receiver/transmitter that operates in the high frequency (hf) range of 2 to 15 MHz. The rt unit operates on upper sidebank (usb), lower sideband (lsb), amplitude modulation (am.), and continuous wave (cw) modes. Frequency stability of the receiver and transmitter is one part in 10^6 per month, minimum. The transmitter power output is 100 watts minimum in all modes except am., which is limited to 25 watts carrier output.

b. The rt unit employs three transmit/receive switching methods to provide the desired signal flow. These are: relay, diode, and power switching. Relay and power switching are conventional means of connecting a circuit to a power source, to another circuit, or to provide isolation. Since diodes exhibit a very low impedance when forward biased, rf signals can be switched to the desired signal path by changing the diode bias.

1–9. Receive Mode of Operation
(fig. 1–2)

a. During the receive mode, rf signals from the antenna or antenna coupler are connected through transmit-receive relay 1K4 to amplifier-limiter 1A5 (limiter 1A5). Limiter 1A5 prevents excessively high rf voltages at the antenna from being applied to the sensitive receiver circuitry. The rf signal, unless excessively high, will pass through limiter 1A5 to the input of rf amplifier 1A1. In rf amplifier 1A1, a narrow frequency band, centered at the operating frequency, is selected and amplified. The selected frequency band is then applied to signal data translator 1A6 (translator 1A6) where the desired operating frequency and bandpass is selected. Translator 1A6 converts the operating frequency to progressively lower if. frequencies of 17.748 MHz, 11.100 MHz, and 455 kHz. This is accomplished by mixing the received frequency with injection frequencies from rf oscillator 1A10 (fig. 1–4), rf oscillator 1A11, and mixer, stage, frequency, 1A3 (frequency mixer 1A3). Frequency accuracy in the frequency conversion process is maintained by the frequency standard in rf oscillator 1A17 (fig. 1–4).

b. The operating mode of the rt unit, selected by the FUNCTION switch is electrically determined by filter assembly 1A19. Filter assembly 1A19 contains the two filters that are in the received intermediate frequency (if.) signal path between translator 1A16 and if. amplifier 1A7. Filter 1A19FL6 is the lsb mode filter; filter 1A19F15 is the filter for both the usb and cw modes. Both filters are bypassed in the am. receive mode. Due to sideband inversion in translator 1A6, the higher sideband frequency is selected for lsb operation, and the lower sideband frequency is selected for usb and cw operation.

c. After the unwanted sideband has been suppressed by the selected filter, the 455 kHz if. signal is applied to if. amplifier 1A7. An automatic gain control (agc) signal, generated in if. ampli-

fier 1A7, is used to control the gain of both rf amplifier 1A1 and if. amplifier 1A7. The 455 kHz output of if. amplifier 1A7 is applied to frequency mixer 1A8 where it is demodulated to obtain the audio intelligence. Demodulation is accomplished by the ssb diode ring modulator/detector or by the am. detector, both of which are located in frequency mixer 1A8. The resulting audio signal is applied to amplifier, audio frequency (af), 1A16 (af amplifier 1A16), HEADPHONE jack 1J100, HANDSET connector 1J5, and REMOTE connector 1J3. The amplified audio output signal

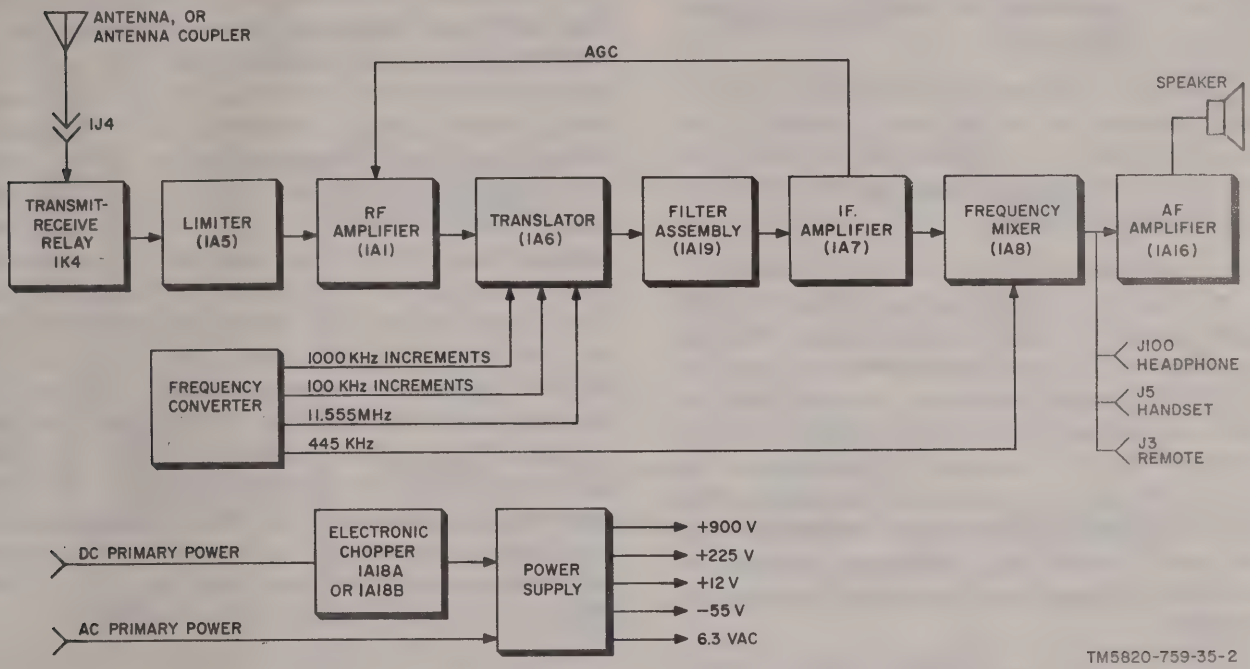


Figure 1–2. Receiver-Transmitter, Radio RT–902/GRC–165 receive mode block diagram.

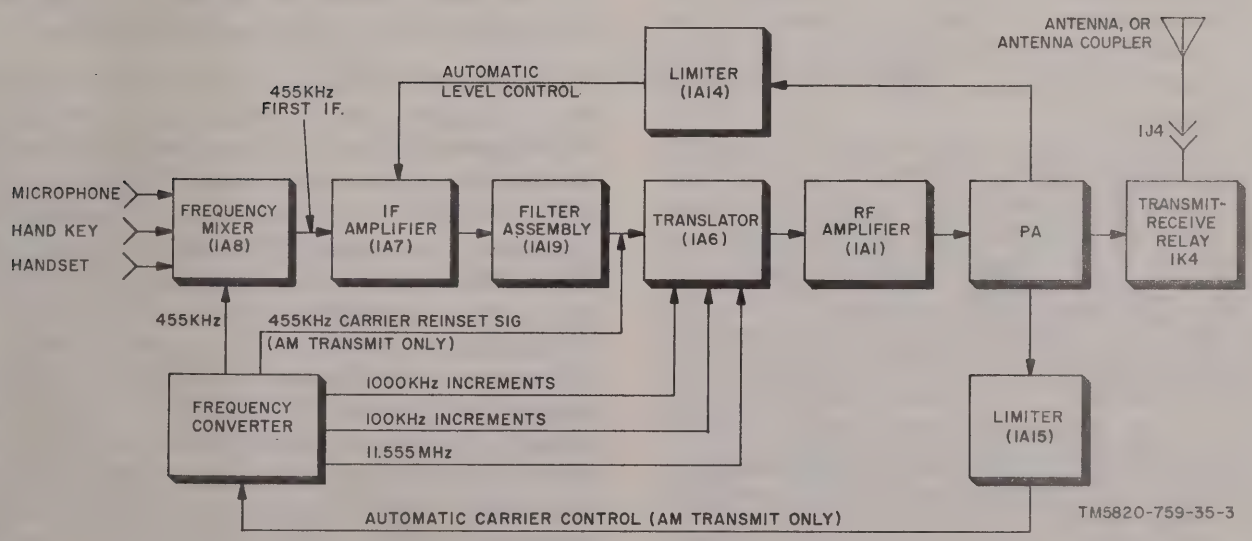


Figure 1–3. Receiver-Transmitter, Radio RT–902/GRC–165 transmit mode block diagram

of af amplifier 1A16 is applied to front panel speaker 1LS1.

1–10. Transmit Mode of Operation
(fig. 1–3)

a. Transmitter keying is accomplished by depressing the microphone or cw hand keyer at the rt unit or by depressing the handset or cw hand keyer at the remote control.

b. In frequency mixer 1A8, audio from the microphone, handset, or cw oscillator (located in frequency mixer 1A8), is amplified and applied to a diode ring modulator/detector to modulate the 455 kHz injection signal.

c. The modulated 455 kHz signal, consisting of both an upper and lower sideband (the 455 kHz injection signal is balanced out), is amplified by if. amplifier 1A7 and applied to filter assembly 1A19. The unwanted sideband is attenuated by the narrow passband of the filter selected by the FUNCTION switch. Because of sideband inversion in translator 1A6, the lower sideband of the 455 kHz if. signal is selected for the usb, cw, and am. transmit modes, and the upper sideband of the 455 kHz if. signal is selected for the lsb transmit mode.

d. The modulated and filtered single sideband 455 kHz if. signal is first converted to 11.100 MHz, then to 17.748 MHz, and finally to the selected operating frequency in translator 1A6. This is accomplished by mixing the modulated 455 kHz if. signal with the same injection frequencies used in the receive mode (para 1–10*a*). During am. transmit operation, the 455 kHz carrier signal that was balanced out in frequency mixer 1A8 is re-inserted with the single sideband input signal at translator 1A6.

e. The output signal of translator 1A6, at the desired operating frequency, is applied to rf amplifier 1A1. Rf amplifier 1A1 is utilized as the driver stage for the power amplifier (pa.) in the transmit mode. Rf amplifier 1A1 and the pa. are both tuned by combinations of fixed capacitors (selected by the 1000 kHz FREQUENCY KILOCYCLES control) and variable inductors (adjusted by the PRESELECTOR and PA TUNE controls). The 100 watt pa. output is connected to the antenna or antenna coupler by transmit-receive relay 1K4.

f. Amplifier-limiter, 1A14 (limiter 1A14) limits excessively large voice peaks at the pa. grids of tubes 1V1, 1V2, and 1V3. Amplifier- limiter, 1A15 (limiter 1A15) provides the correct level of re-inserted carrier (for 25 watts carrier output) during am. transmit operation.

1–11. Frequency Conversion
(fig. 1–4)

a. Frequency conversion is provided by synthesizer, electrical frequency, 1A2 (synthesizer 1A2); oscillators, rf, 1A9 through 1A13, and 1A17 (rf oscillators 1A9, 1A10, 1A11, 1A12, 1A13, and 1A17); mixer, stage, frequency, 1A4 (frequency mixer 1A4); and frequency mixer 1A3. These subassemblies provide the required injection frequencies to translator 1A6 (fig. 1–2, 1–3) and frequency mixer 1A8. This enables the conversion (heterodyning) of the received rf signals to the audio signal during the receive mode and the conversion of the transmit mode. The discrete rf oscillator injection frequencies are determined by the position of the FREQUENCY KILOCYCLES controls. The operating frequency may be any one of 13,000 available channels, spaced at 1 kHz increments, between 2 and 15 MHz. Continuous tuning between channels is provided by rf oscillator 1A9 and is energized by pulling out on the 1 kHz FREQUENCY KILOCYCLES control knob.

Note. In the following discussion only the ssb receive mode is explained.

b. To maintain the required frequency accuracy for ssb operation, it is necessary to cancel out the inherent errors, either high or low in frequency, in each crystal used in rf oscillators 1A10 through 1A13. In the following paragraphs (*c* through *g*) the frequency conversion process and the error cancellation methods employed are explained.

c. The desired received rf signal and the output of rf oscillator 1A10 (with an error) are applied to translator 1A6 (fig. 1–2) where they are added together to produce the first if. signal, 17.748 MHz±0.5 MHz. Since the two input frequencies at translator 1A6 are added, the frequency error (either high or low) in the output of rf oscillator 1A10 (fig. 1–4) will be reflected in the first if. signal. This error will be in the same direction as the error in the output of rf oscillator 1A10. The output frequency of rf oscillator 1A10 is determined by the position of the 1000 kHz FREQUENCY KILOCYCLES control. The output of rf oscillator 1A11 (with an error) is also applied to translator 1A6, where it is subtracted from the first if. signal to produce the second if. signal, 11.100 MHz ± 0.5 MHz. Since the output of rf oscillator 1A11 is subtracted from the first if. sig-

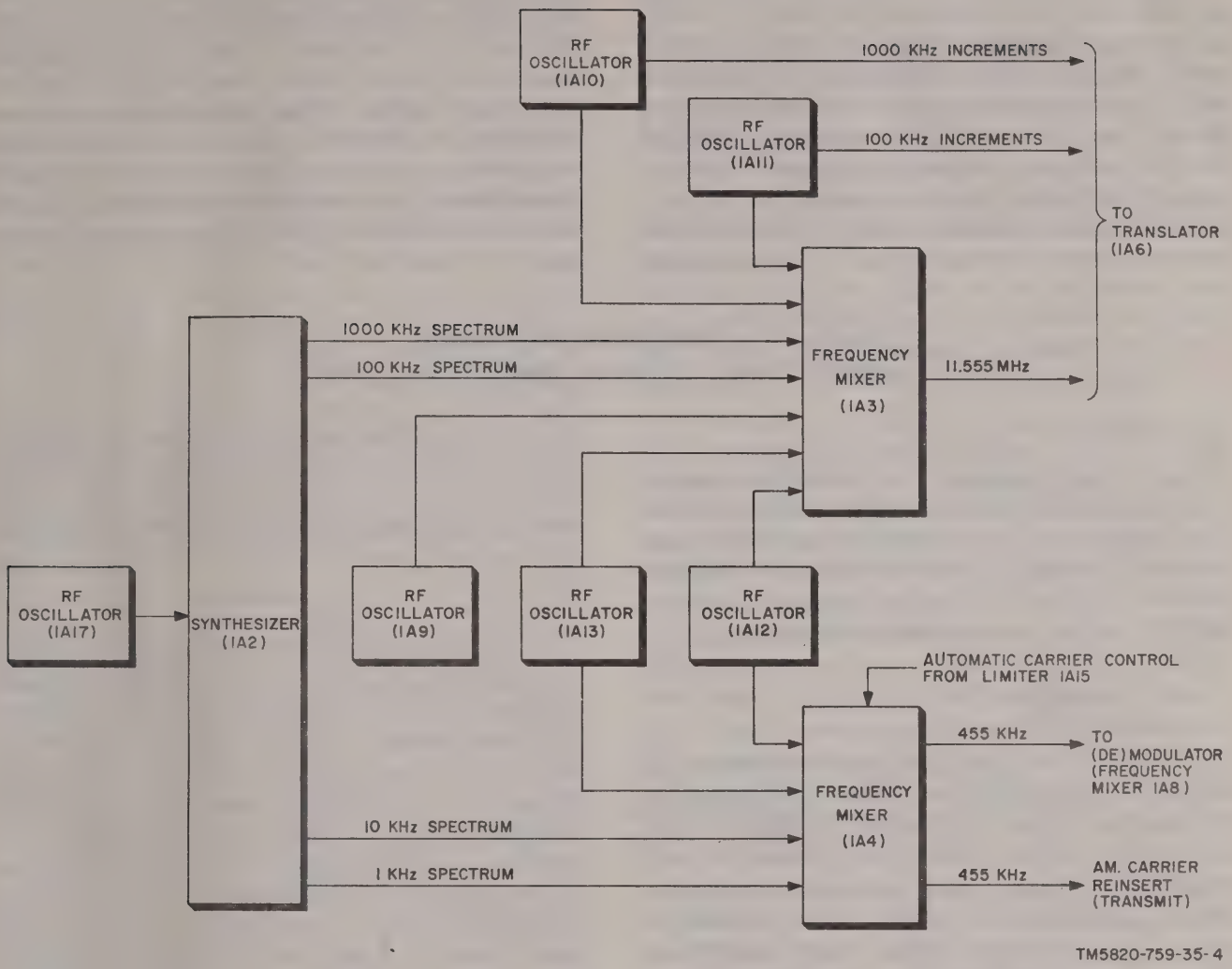


Figure 1–4. Frequency conversion scheme block diagram.

nal, the error contained in the output is reversed in the second if. signal. The error of rf oscillator 1A10 retains the original error relationship. The output frequency of rf oscillator 1A11 is determined by the position of the 100 kHz FREQUENCY KILOCYCLES control.

d. The outputs of rf oscillators 1A10 and 1A11 that are applied to translator 1A6 are also applied to frequency mixer 1A3 (fig. 1–4) with the outputs of rf oscillators 1A12 and 1A13. The output frequencies of rf oscillators 1A12 and 1A13 are determined by the position of the 10 kHz and 1 kHz FREQUENCY KILOCYCLES controls, respectively. Frequency mixer 1A3 mixes the frequencies of rf oscillators 1A10 and 1A11 with corresponding frequencies generated by spectrum oscillators located in synthesizer 1A2. The accuracy of the spectrum frequencies is controlled by the frequency standard in rf oscillator 1A17. Since the frequency standard error is negligible (1 part in 10^6) as compared to the error of rf oscillators 1A10 through 1A13, it is therefore considered to be non-existent. Thus, the output of frequency mixer 1A3, approximately 11.555 MHz, maintains the same errors and relationship as the second if. signal plus the errors of rf oscillators 1A12 and 1A13.

e. In translator 1A6 the 11.100 MHz second if. signal is subtracted from the output of frequency mixer 1A3. When the second if. signal is subtracted, the errors of rf oscillators 1A10 and 1A11 cancel out. The result is a final if. signal of approximately 455 kHz containing only the errors of rf oscillators 1A12 and 1A13. These two remaining errors have the original relationship to their oscillator frequencies.

f. The 455 kHz output of translator 1A6, with the errors of rf oscillators 1A12 and 1A13, is filtered by filter assembly 1A19 (fig. 1–2), amplified by if. amplifier 1A7, and applied to frequency mixer 1A8. In frequency mixer 1A8, the errors of rf oscillators 1A12 and 1A13 are canceled out, and the received audio signal is detected. This is accomplished in the following manner.

g. In frequency mixer 1A4 (fig. 1–4), the outputs of rf oscillators 1A12 and 1A13 are mixed with corresponding frequencies derived from the spectrum oscillators located in synthesizer 1A2. The output of frequency mixer 1A4 contains the same error as the final if. frequency and has the same relationship. When these two signals are combined in frequency mixer 1A8 (which subtracts one signal from the other), the errors of rf oscillators 1A12 and 1A13 are canceled out, and the received audio signal is detected and amplified.

Section III. RECEIVER-TRANSMITTER, RADIO RT–902/GRC–165 CIRCUIT ANALYSIS

1–12. General

This section contains a description and analysis of each of the major functional circuits or assemblies comprising the rt unit. The assemblies are described in order of their reference designations, followed by the rt unit power supply circuitry, power amplifier (pa), and meter circuitry.

1–13. Rf Amplifier 1A1
(fig. 6–13)

a. General. Rf amplifier 1A1 is a two-stage vacuum tube amplifier that is used in both receive and transmit modes. In the receive mode it provides initial amplification of the received rf signals. In the transmit mode it functions as the pa. driver stage. Input and output signal switching is accomplished by relay 1A1K1. The rf signals are progressively amplified by two tuned-plate/tuned-grid class A rf amplifiers, 1A1A6V1 and 1A1A6V2. The plate and grid circuits are coarse tuned by the 1000 kHz FREQUENCY KILOCYCLES control which, through switch S1 on subassemblies 1A1A1 through 1A1A4, connects various capacitors in parallel with rf transformers 1A1A5L1 through 1A1A5L4. Fine tuning of the plate and grid circuits is accomplished by the PRESELECTOR tuning control which adjusts the position of the slugs in the rf transformers. Gain control of 1A1A6V1 and 1A1A6V2 is provided by agc amplifier 1A1A6Q1 in the receive mode. Transistor 1A1A6Q1 varies the dc grid bias of vacuum tubes 1A1A6V1 and 1A1A6V2 at a rate that is inversely proportional to the agc voltage applied to it from if. amplifier 1A7 (fig. 1–2). Thus, as the agc voltage increases (more negative), the conduction rate of transistor 1A1A6Q1 is decreased, increasing the control grid bias (grid becomes more negative) and lowering the output of vacuum tubes 1A1A6V1 and 1A1A6V2. Feedback is provided by the pa. during transmit. Crystals 1A1A1Y1/1A1A1Y2 and 1A1A2Y3/1A1A2Y4, located in the LC circuits formed by rf transformers 1A1A5L1 and 1A1A5L2, are used to trap spurious signals generated by rf oscillator 1A10 (fig. 1–7).

b. Receive. In the receive mode, the rf signals from limiter 1A5 (fig. 1–2) are applied through terminals 8 and 12 of relay 1A1K1 to the primary of rf transformer 1A1A5L1. Relay 1A1K1 is energized by the secondary keyline in the receive mode. The rf signals are then coupled from the secondary of rf transformer 1A1A5L1 by switches 1A1A1S1A and 1A1A2S1B to rf transformer 1A1A5L2 and through coupling capacitor 1A1A6C42 from rf transformer 1A1A5L2 to the control grid of rf amplifier 1A1A6V1. Coarse tuning of the rf transformers is provided by switches 1A1A1S1A and 1A1A2S1B. These switches connect the required capacitors, rf transformer taps, and load resistors into the circuit. Fine tuning of the rf transformers is accomplished by the PRESELECTOR control that adjusts the position of the slugs in the rf transformers. The plate circuit of rf amplifier 1A1A6V1 is coarse tuned to the operating frequency by switch 1A1A3S1C and rf transformer 1A1A5L3 and is fine tuned in the same manner as described for the control grid circuit. The output of rf amplifier 1A1A6V1 is applied through coupling capacitor 1A1A6C49 to the control grid of rf amplifier 1A1A6V2. Amplified by rf amplifier 1A1A6V2, the rf signal is then applied to pin 5 of rf transformer 1A1A5L4. The rf signal is then coupled from transformer 1A1A5L4 through series resistor 1A1A5R1 to terminals 5 and 9 of relay 1A1K1. From relay 1A1Kl, the rf signal is applied through connector 1A1J50 to translator 1A6 (fig. 6–17). The plate circuit of rf amplifier 1A1A6V2 is coarse tuned to

the operating frequency by switch 1A1A4S1D and rf transformer 1A1A5L4 and is fine tuned in the same manner as the grid and plate circuits of rf amplifier 1A1A6V1.

c. Transmit. During the transmit mode, rf signals from translator 1A6 (fig. 6–17) are applied to connector 1A1J50. From 1A1J50 the rf signals are coupled through terminals 9, 1, 3, and 11 of secondary key relay 1A1K1 to terminal 5 of rf transformer 1A1A5L1. Depending upon the position of switch 1A1A1S1A, the rf signals will be applied, from either pin 5 or 4 of 1A1A5L1, through switches 1A1A1S1A, 1A1A2S1B to rf transformer 1A1A5L2 and through coupling capacitor 1A1A6C42 to the control grid of rf amplifier 1A1A6V1. Coarse and fine tuning of the grid circuit is accomplished for the transmit mode in the same manner as it is in the receive mode. The output of rf amplifier 1A1A6V1 is applied to rf transformer 1A1A5L3, switch 1A1A3S1C, and through coupling capacitor 1A1A6C49 to the control grid of rf amplifier 1A1A6V2. Coarse and fine tuning of the plate circuit of 1A1A6V2 is also accomplished in the same manner for the transmit mode as it is in the receive mode. The output of rf amplifier 1A1A6V2 is applied to pin 5 of rf transformer 1A1A5L4, switch 1A1A4S1D, and through coupling capacitor 1A1A5C61 and terminal 1A1A5E147 to the pa. Coarse and fine tuning of rf amplifier 1A1A6V2 plate circuit is also accomplished in the same manner for the transmit mode as it is for the receive mode. During transmit, feedback is applied to the cathode of rf amplifier 1A1A6V2 through capacitors 1C21, 1C24 (fig. 6–12①) and connector 1P30 from the pa. This feedback maintains the output of rf amplifier 1A1A6V2 at a constant level.

1–14. Synthesizer 1A2
(fig. 6–14)

a. Synthesizer 1A2 provides the four spectrum generator output signals (1 MHz, 100 kHz, 10 kHz, and 1 kHz) to frequency mixers 1A3 and 1A4. Each of the four spectrum generators provides a spectrum of frequencies, referenced to the 1 MHz frequency standard, for mixing with the output signals of rf oscillators 1A10 through 1A13 (fig. 1–7 thru 1–10) (refer to paragraph 1–11). The MHz frequency standard output is used to key, after shaping, the 1 MHz spectrum generator and after being divided down to 100 kHz, 10 kHz, and 1 kHz, to key the 100 kHz, 10 kHz, and the 1 kHz spectrum generators, respectively. This is accomplished in the following manner.

b. The 1 MHz frequency standard output of rf oscillator 1A17 (fig. 6–12 ①) is applied through connector 1A2J43 and coupling capacitor 1A2C45 to buffer amplifier 1A2Q20. Transistor 1A2Q20 amplifies the input signal to a degree that the positive half cycles of the sine wave switch on 1 MHz amplifier 1A2Q1. Transistor 1A2Q1 clips the positive half cycle of the sine wave producing a flat top pulse. The width of the flat top is 0.25 μsec, and is determined by the setting of the 1 MHz pulse width adjustment 1A2R66. This signal is applied to transistors 1A2Q2 and 1A2Q14.

c. The pulse applied to shaper 1A2Q14 is further refined and shaped and then applied to emitter follower 1A2Q15. The output pulse of emitter follower 1A2Q15 keys the 1 MHz spectrum generator LC circuit, consisting of inductor 1A2L5 and 1A2C29. When the LC circuit is keyed, harmonic frequencies centered about the natural frequency of the LC circuit are produced at 1 MHz intervals. For example, the LC circuit would normally oscillate near 17 MHz. But, since it is keyed at a 1 MHz rate, it produces a spectrum of at least 10 frequencies centered at 17 MHz and spaced at 1 MHz intervals (table 1–1). These frequencies are applied to frequencies mixer 1A3 (fig. 6–15) for mixing with the output of rf amplifier 1A10.

d. The pulse applied to transistor 1A2Q2 is divided by two by the flip-flop multivibrator consisting of transistors 1A2Q2 and 1A2Q3. The output of transistor 1A2Q3, a 500 kHz square wave, is then divided by five by the astable multivibrator consisting of transistors 1A2Q4 and 1A2Q5. This provides the 100 kHz pulse to emitter follower 1A2Q16 as the trigger pulse for the 100 kHz spectrum generator oscillator.

e. Frequency division in the astable multivibrator formed by transistors 1A2Q4 and 1A2Q5 is controlled by the time constant of capacitor 1A2C9 and resistors 1A2R15 and 1A2R16. The 100 kHz clock frequency adjustment 1A2R11, sets the base bias of transistor 1A2Q4 so that five 1 MHz pulses are required by the circuit to produce one output pulse. The first pulse at capacitor 1A2C7 turns on transistor 1A2Q4 which in turn causes transistor 1A2Q5 to conduct. Current through transistor 1A2Q5 and resistor 1A2R12 saturates both transistors, 1A2Q4 and 1A2Q5, until capacitor 1A2C9 charges, causing reverse bias on transistor 1A2Q4. As a result, both transistors 1A2Q4 and 1A2Q5 turn off and remain

Table 1–1. Rf Oscillators and Spectrum Frequencies

Control digit	Rf Oscillator Frequencies (MHz)				Spectrum Frequencies (MHz)			
	1A10 (1000 kHz control)	1A11 (100 kHz control)	1A12 (10 kHz control)	1A13 (1 kHz control)	MHz Spectrum	100 kHz Spectrum	10 kHz Spectrum	1 kHz Spectrum
0	----------	6.147	1.8465	0.7985	----------	28.1	1.20	1.900
1	----------	6.247	1.8365	0.7975	----------	28.2	1.19	1.899
2	15.247	6.347	1.8265	0.7965	23.0	28.3	1.18	1.898
3	14.247	6.447	1.8165	0.7955	22.0	28.4	1.17	1.897
4	13.247	6.547	1.8065	0.7945	21.0	28.5	1.16	1.896
5	12.247	6.647	1.7965	0.7935	20.0	28.6	1.15	1.895
6	11.247	6.747	1.7865	0.7925	19.0	28.7	1.14	1.894
7	10.247	6.847	1.7765	0.7915	18.0	28.8	1.13	1.893
8	9.247	6.947	1.7665	0.7905	17.0	28.9	1.12	1.892
9	8.247	7.047	1.7565	0.7895	16.0	29.0	1.11	1.891
10	7.247	----------	----------	----------	15.0	----------	----------	----------
11	6.247	----------	----------	----------	14.0	----------	----------	----------
12	5.247	----------	----------	----------	13.0	----------	----------	----------
13	4.247	----------	----------	----------	12.0	----------	----------	----------
14	3.247	----------	----------	----------	11.0	----------	----------	----------

in this state since the voltage on capacitor 1A2C9 is greater than the input level. This condition exists until the sixth pulse (first of the next pulse sequence) is received. Transistors 1A2Q4 and 1A2Q5 conduct approximately one-half of the frequency period (500 kHz) because of the charge and discharge time capacitor 1A2C9.

f. The 100 kHz output of astable multivibrator, 1A2Q4 and 1A2Q5, is divided by two by flip-flop 1A2Q6 and 1A2Q7. The resultant 50 kHz signal drives another astable multivibrator, 1A2Q8 and 1A2Q9. The 10 kHz output of the second astable multivibrator is routed to a third flip-flop, 1A2Q10 and 1A2Q11, which produces an output frequency of 5 kHz. The 5 kHz signal is then applied to a third and final astable multivibrator, 1A2Q12 and 1A2Q13, which divides the 5 kHz input signal by five to produce an output frequency of 1 kHz.

g. The output frequencies of the astable multivibrators, 100 kHz, 10 kHz, and 1 kHz, are used to drive the three spectrum generators (Hartly oscillators) 1A2Q17, 1A2Q18, and 1A2Q19. In the 10 kHz and 1 kHz spectrum generators, the oscillator transistors (1A2Q18 and 1A2Q19) conduct during the high portion of their multivibrator output. This provides current to the pulse transformers, 1A2T3 and 1A2T4, which dampens the oscillations. The oscillations are sustained by feedback from capacitors 1A2C41 and 1A2C43 to the oscillator transistors which are biased in the low current region. Oscillations are discontinued when the spectrum generators, 1A2Q18 and 1A2Q19, are forced off, thus breaking the feedback path. In the 100 kHz spectrum generator, 1A2Q17, the pulse transformer, 1A2T2, is driven on by emitter follower transistor 1A2Q16. Feedback is provided by capacitor 1A2C33.

1–15. Frequency Mixer 1A3
(fig. 6–15)

a. Frequency mixer 1A3 provides the 11.555 MHz injection signal to translator 1A6 for error canceling and frequency conversion.

b. The output frequency (with an error) of rf oscillator 1A10, selected by the 1000 kHz FREQUENCY KILOCYCLES control (refer to table 1–1), is applied to buffer 1A3Q1. The output of buffer 1A3Q1 is applied to the base of mixer 1A3Q2 for mixing with the MHz spectrum (11.0 MHz to 23.0 MHz in 1 MHz increments) from synthesizer 1A2. The output frequency of rf oscillator 1A10 is mixed with all of the frequencies in the MHz spectrum. However, only when it is subtracted from a spectrum frequency that provides a difference of approximately 7.7 MHz between the two signals, will the difference be admitted by filter 1A3FL1 to amplifier 1A3Q3. In this way, no matter what position the 1000 kHz FREQUENCY KILOCYCLES control is set at, only the 7.7 MHz difference between the rf oscillator and the MHz

spectrum is applied to 1A3Q3. Other frequency combinations are produced but are attenuated by the narrow bandpass of filter 1A3FL1. Because the rf oscillator frequency was subtracted from the spectrum frequency, the rf oscillator error has been reversed.

c. The output frequency of rf oscillator 1A11 (with an error), as selected by the position of the 100 kHz FREQUENCY KILOCYCLES control (table 1–1), is applied to the base of buffer 1A3Q6. The output of buffer 1A3Q6 is applied to the base of mixer 1A3Q7 for mixing with the output of the 100 kHz spectrum from synthesizer 1A2. The output frequency of rf oscillator 1A11 is mixed with all of the frequencies in the 100 kHz spectrum (28.1 MHz to 29.0 MHz in 100 kHz increments) but only when it is subtracted from a spectrum frequency that provides a difference of approximately 21.9 MHz between the two signals, will the difference be admitted by filter 1A3FL4 to mixer 1A3Q8. Other frequency combinations are produced but are attenuated by the narrow bandpass of 1A3FL4. Because the rf oscillator frequency was subtracted from the spectrum frequency, the rf oscillator error has been reversed.

d. The outputs of amplifier 1A3Q3 and filter 1A3FL4 are applied to mixer 1A3Q8. Only the difference between the two signals, approximately 14.2 MHz, is admitted by filter 1A3FL5 to mixer 1A3Q9. The error of rf oscillator 1A10 has again been reversed by being subtracted from the 21.9 MHz signal and has now returned to the original error-frequency relationship.

e. The output frequencies of rf oscillators 1A12 and 1A13 (with errors), (or 1A9 during continuous tuning), are applied to mixer 1A3Q4 and are controlled by the 10 kHz FREQUENCY KILOCYCLES controls, respectively. The sum of the two frequencies, approximately 2.5 MHz, is selected by filter 1A3FL2 as the second input to mixer 1A3Q9. Because the two signals are added, the relationship of their errors to their frequencies remains the same.

f. The output signals from filters 1A3FL2 (2.5 MHz) and 1A3FL5 (14.2 MHz) are applied to mixer 1A3Q9 where the difference, approximately 11.555 MHz, is selected by filter 1A3FL3 as the input to amplifier 1A3Q5. The output of amplifier 1A3Q5 (the 11.555 MHz error signal), containing the same original error relationship of rf oscillator 1A10 and the reverse error relationship of rf oscillators 1A11, 1A12, and 1A13, is applied to translator 1A6.

1–16. Frequency Mixer 1A4
(fig. 6–16)

a. Frequency mixer 1A4 provides the 455 kHz injection signal to frequency mixer 1A8 and, during the am. transmit mode, provides the 455 kHz carrier reinsert signal to translator 1A6. The 455 kHz injection signal is used for frequency conversion and error canceling.

b. The output frequency of rf oscillator 1A12 (with an error), selected by the 10 kHz FREQUENCY KILOCYCLES control (table 1–1), is applied to the base of mixer 1A4Q1. Also applied to mixer 1A4Q1 is the 10 kHz spectrum output from synthesizer 1A2 (1.11 MHz to 1.20 MHz in 10 kHz increments). The output frequency of rf oscillator 1A12 is mixed with all of the spectrum frequencies contained in the 10 kHz spectrum. However, only when a spectrum frequency that will give a difference of approximately 646.5 kHz when subtracted from the rf oscillator 1A12 output frequency, will the difference be admitted by filter 1A4FL1 to amplifier 1A4Q2. Other frequency combinations are produced but are attenuated by the narrow bandpass of filter 1A4FL1. Because the spectrum frequency was subtracted from the output frequency of rf oscillator 1A12, the rf oscillator error retains the same relationship.

c. The output frequency of rf oscillator 1A13 (with an error), selected by the 1 kHz FREQUENCY KILOCYCLES control (table 1–1), is applied to the base of mixer 1A4Q3. Also applied to mixer 1A4Q3 is the 1 kHz spectrum output of synthesizer 1A2 (1.891 MHz to 1.900 MHz in 1 kHz increments). The output frequency of rf oscillator 1A13 is mixed with all the spectrum frequencies contained in the 1 kHz spectrum. However, only when the output of rf oscillator 1A13 is subtracted from a spectrum frequency that provides a difference of approximately 1.1015 MHz, will the difference be admitted to mixer 1A4Q4 by filter 1A4FL2. Other frequency combinations are produced but are attenuated by the narrow bandpass of filter 1A4FL2. Because the rf oscillator frequency was subtracted from the spectrum frequency the rf oscillator error has been reversed.

d. During vfo operation, when the 1 kHz FREQUENCY KILOCYCLES control has been pulled out to provide continuous tuning between chan-

nels, +12 V dc supplied by switch 1S5 is applied to the base of mixer 1A4Q3 to bias it into cutoff. the output of rf oscillator 1A13 is removed from frequency mixers 1A3 and 1A4. The output signal of rf oscillator 1A9, enabled for vfo operation, is applied to frequency mixer 1A3. Oscillator 1A4Q6 is energized and applies an input signal of 1.1015 MHz to mixer 1A4Q4. The 1.1015 MHz frequency of oscillator 1A4Q6 is controlled by crystal 1A4Y1.

e. During am. receive mode, +12 Vdc is applied through pin E of connector 1A4P18 to bias mixer 1A4Q3 and oscillator 1A4Q6 into cutoff. This removes the 455 kHz injection signal from frequency mixer 1A8.

f. Mixer 1A4Q4 mixes the 646.5 MHz output of amplifier 1A4Q2 and the 1.1015 MHz output of either mixer 1A4Q3 or oscillator 1A4Q6. The difference between the two signals, 455 kHz, is selected by the bandpass of filter 1A4FL3 as the input to amplifier 1A4Q5. Amplified by 1A4Q5, the 455 kHz injection signal is applied to frequency mixer 1A8 and to carrier reinsert signal amplifier 1A4Q7.

g. Carrier reinsert signal amplifier 1A4Q7 is energized only during the am. transmit mode. The amount of amplification provided by 1A4Q7 is controlled by the automatic carrier control (acc) signal from amplifier-limiter 1A15. The output of 1A4Q7 is applied to translator 1A6 as the carrier reinsert signal.

1–17. Limiter 1A5
(fig. 1–5)

a. Limiter 1A5 protects the sensitive input circuits of rf amplifier 1A1 from damage by any excessively strong rf signal that has been received by the antenna. Limiter 1A5 consists of relay 1A5K1, detector 1A5CR1, relay driver 1A5Q1, and associated circuitry. Relay 1A5K1, deenergized during normal receive operation, couples input rf signal from transmit/receive relay 1K4 to the input of rf amplifier 1A1.

b. Diode 1A5CR1 detects the positive portion of the received signal. If an excessively strong signal is received, the positive portion biases 1A5Q1 into conduction, thereby energizing relay 1A5K1. With 1A5Q1 energized, the input of rf amplifier 1A1 is disconnected from the received rf signal and connected to ground. The trip of 1A5K1, approximately three to six volts of rf, is determined by resistors 1A5R2 and 1A5R3.

1–18. Translator 1A6
(fig. 6–17)

Translator 1A6 is a bidirectional assembly used to convert the received rf signal to the 455 kHz if. signal and to convert the modulated 455 kHz if. transmit signal to the operating frequency. Frequency conversion is accomplished by mixing the input signal with injection signals from rf oscillators 1A10 and 1A11, and frequency mixer 1A3.

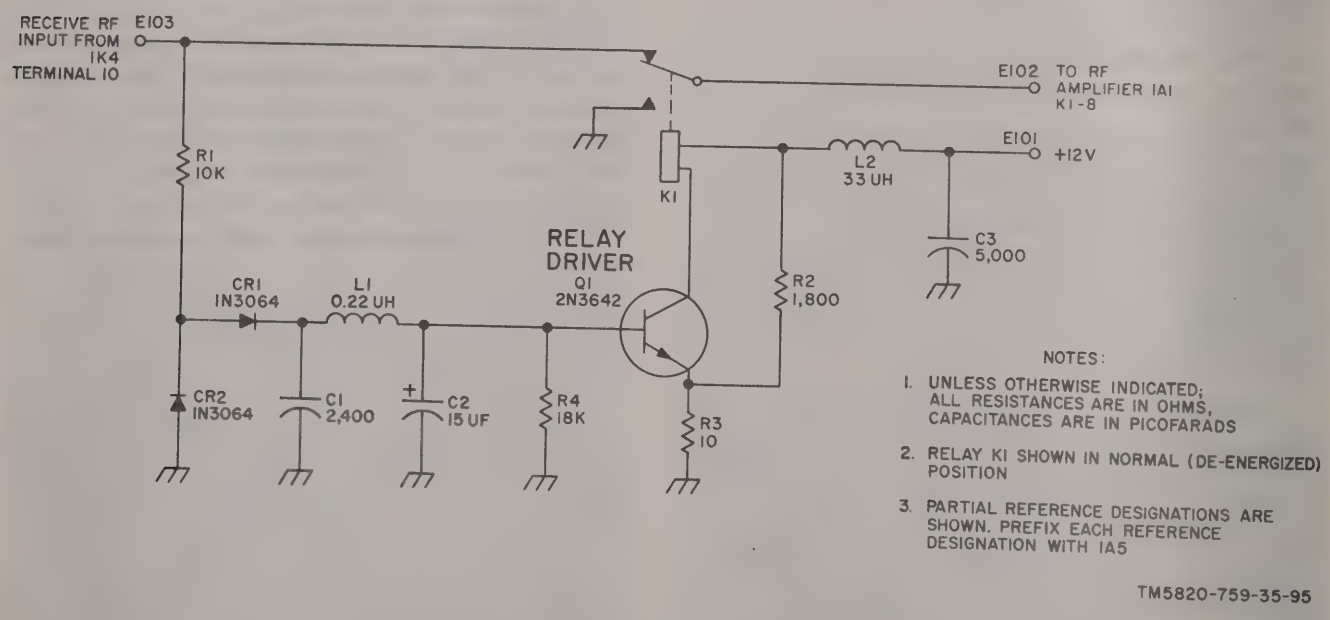


Figure 1–5. Amplifier-limiter 1A5, schematic diagram.

The reversal of the signal flow is accomplished by using forward and reverse biased diodes in the signal path. A forward biased diode provides a low impedance path for the signal; a reverse biased diode provides a high impedance path and blocks the signal. Control of the diodes is provided by the +12V rec/grd xmit and the +12 V xmit/grd rec lines supplied to terminals 1A6E62 and 1A6E63, respectively.

a. Receive.

(1) During the receive mode, +12 Vdc is supplied to terminal 1A6E62, and ground to terminal 1A6E63. The +12 V dc at 1A6E62 is applied through choke 1A6L4, resistor 1A6R4, and choke 1A6L2 to forward biased diode 1A6CR1. The ground at terminal 1A6E3 forward biases diode 1A6CR3 through choke 1A6L5, diode 1A6CR5, and resistor 1A6R5. Diodes 1A6CR2, 1A6CR4, and 1A6CR11 are reverse biased by the +12 V dc at terminal 1A6E62. Diode 1A6CR6 is reverse biased by the ground at terminal 1A6E63. The ground signal is coupled through choke 1A6L5, resistor 1A6R6, and the matching transformer winding of filter 1A6FL1 to the anode of 1A6CR6.

(2) Forward biased diode 1A6CR1 couples the received rf signal, supplied to connector 1A6J11, to the base of frequency mixer 1A6Q1 for mixing with the output of rf oscillator 1A10. Forward biased diode 1A6CR3 couples the output of 1A6Q1 to the input of filter 1A6FL1. During the receive mode, diode 1A6CR5 connects capacitor 1A6C2 across the collector of frequency mixer 1A6Q1. Capacitor 1A6C2 compensates for the differences in the input and output capacitances of frequency mixer 1A6Q1 that filter 1A6FL1 encounters when it is switched from the collector circuit (receive mode) to the base circuit (transmit mode). The sum of the two signals from frequency mixer 1A6Q1, approximately 17.247 MHz, is selected by filter 1A6FL1 as the input to frequency mixer 1A6Q2.

(3) The +12 Vdc at terminal 1A6E62 is applied through resistor 1A6R16 and the matching transformer winding of filter 1A6FL1 to forward bias diode 1A6CR7 and reverse bias diode 1A6CR9. Ground from terminal 1A6E63 is applied through forward biased diode 1A6CR16 and resistor 1A6R11 to forward bias diode 1A6CR10 and reverse bias diode 1A6CR8. Diode 1A6CR7 couples the output signal from filter 1A6FL1 to the base of frequency mixer 1A6Q2. The 17.247 MHz signal is mixed with the output of rf oscillator 1A11 and coupled through forward biased diode 1A6CR10 to filter 1A6FL2. Filter 1A6FL2 selects the difference between the two signals, approximately 11.100 MHz, as the input to frequency mixer 1A6Q3.

(4) The +12 Vdc at terminal 1A6E62 is applied through resistor 1A6R16 and the matching transformer winding of filter 1A6FL2 to forward bias diode 1A6CR12 and to reverse bias diode 1A6CR14. The ground at terminal 1A6E63 is applied through resistor 1A6R17 and the primary winding of transformer 1A6T1 to forward bias diode 1A6CR15 and reverse bias diode 1A6CR13. Diode 1A6CR16 is also forward biased by the ground at terminal 1A6E63. Forward biased diode 1A6CR12 couples the 11.100 MHz output of filter 1A6FL2 to the base of frequency mixer 1A6Q3. Frequency mixer 1A6Q3 mixes the 11.100 MHz signal with the 11.555 MHz output of frequency mixer 1A3. Forward biased diode 1A6CR15 couples the output signal from the collector of frequency mixer 1A6Q3 to the primary winding of transformer 1A6T1. Forward biased diode 1A6CR16 provides the dc path to ground, at terminal 1A6E63, for the collector of frequency mixer 1A6Q3 through diode 1A6CR15 and the primary winding of transformer 1A6T1. Transformer 1A6T1 and capacitor 1A6C28 form a tuned circuit that selects the 455 kHz frequency difference between the two signals applied to frequency mixer 1A6Q3. The 455 kHz output is applied through transformer 1A6T1 and connector 1A6J10 to filter assembly 1A19.

b. Transmit.

(1) During the transmit mode, ground is applied to terminal 1A6E62 and + Vdc is applied to terminal 1A6E63. The modulated 455 kHz transmit if. signal is applied to connector 1A6J10 from filter assembly 1A19. The output signal, at the operating frequency, is coupled from connector 1A6J11 to rf amplifier 1A1. During am. transmit, the 455 kHz carrier reinsert signal is also applied to connector 1A6J10.

(2) The +12 Vdc from terminal 1A6E63 is applied through resistor 1A6R17 and transformer 1A6T1 to forward bias diode 1A6CR15. Diode 1A6CR16 is also reverse biased by the +12 Vdc. Ground from terminal 1A6E62 is applied through forward biased diode 1A6CR11 and the matching transformer winding of filter 1A6FL2 to forward bias diode 1A6CR14 and reverse bias diode 1A6CR12.

(3) The modulated 455 kHz transmit if. sig-

nal at connector 1A6J10 is coupled through transformer 1A6T1 and forward biased diode 1A6CR13 to the base of frequency mixer 1A6Q3 where it is mixed with the 11.555 MHz output from frequency mixer 1A3. The output of frequency mixer 1A6Q3 is coupled through forward biased diode 1A6CR14 to the input of filter 1A6FL2. Filter 1A6FL2 selects the frequency difference, 11.100 MHz, as the input to frequency mixer 1A6Q2.

(4) The +12 Vdc from terminal 1A6E63 is applied through resistor 1A6R17 and the matching transformer winding of filter 1A6FL2 to forward bias diode 1A6CR8 and reverse bias diode 1A6CR10. A ground signal from terminal 1A6E62 is applied through resistor 1A6R16 and the matching transformer winding of filter 1A6FL2 to forward bias diode 1A6CR9 and reverse bias diode 1A6CR7. The 11.100 MHz output of filter 1A6FL2 is applied through forward biased diode 1A6CR8 to frequency mixer 1A6Q2 where it is mixed with the output of rf oscillator 1A11. The output of frequency mixer 1A6Q2 is coupled through forward biased diode 1A6CR9 to the input of filter 1A6FL1. Filter 1A6FL1 selects the sum of the two frequencies, approximately 17.247 MHz, as the input to frequency mixer 1A6Q1.

(5) The +12 Vdc from terminal 1A6E63 is applied through choke 1A6L5 to reverse bias diode 1A6CR5 and through resistor 1A6R6 and the matching transformer winding of filter 1A6FL1 to forward bias diode 1A6CR6. The ground signal at terminal 1A6E62 is applied through choke 1A6L4, through forward bias diode 1A6CR4, through choke 1A6L2, through forward bias diode 1A6CR2, and to reverse bias diode 1A6CR1. The output signal from filter 1A6FL1 is coupled through forward biased diode 1A6CR6 to frequency mixer 1A6Q1 where it is mixed with the output of rf oscillator 1A10. The output of frequency mixer 1A6Q1, at the desired operating frequency, is coupled through forward biased diode 1A6CR2 and coupling capacitor 1A6C1 to connector 1A6J11.

1–19. If. Amplifier 1A7
(fig. 6–18)

If. amplifier 1A7 consists of a five stage receive 455 kHz if. amplifier with noise limiting, a four stage agc amplifier and detector, and a single stage transmit 455 kHz if. amplifier. An agc signal, proportional to the receive if. signal amplitude, is applied to the first three receive 455 kHz if. amplifiers and to rf amplifier 1A1. The receive noise limiter is enabled through the ON contacts of front panel NOISE LIMITER switch.

a. Receive.

(1) *If. Amplifiers.* In the receive mode, the 455 kHz if. signal is applied to terminal 1A7E167. The signal is progressively amplified by receive if. amplifiers 1A7Q1 through 1A7Q5. Interstage coupling is accomplished by transformers 1A7T1 through 1A7T4. These transformers are tuned to 455 kHz to provide frequency selectivity. From the collector of receive if. amplifier 1A7Q5, the output signal is applied to input/output connector 1A7J22. From the secondary of transformer T4 signal goes through series resistor 1A7R50 to agc adjust control 1A7R39. During the receive mode, the output signal at connector 1A7J22 is applied to frequency mixer 1A8 for audio detection.

(2) Noise Limiter. The noise limiter (consisting of diodes 1A7CR1, 1A7CR2, resistor 1A7R21, and capacitors 1A7C16 and 1A7C17) is enabled when front panel NOISE LIMITER switch 1A4 is set at ON. The noise limiter switch energizes relay 1A7K1 by applying a closure to ground at pin C of connector 1A7J20. When energized, relay 1A7K1 connects the noise limiter circuit across the primary of interstage transformer 1A7T4 to clip any excessively large noise spikes from the received if. signal.

(3) *Automatic Gain Control.* Automatic gain control of the received signal level is accomplished by coupling the output of the fourth receive if. amplifier (1A7Q4) through series resistor 1A7R50 to agc adjust control 1A7R39. The wiper of 1A7R39 is adjusted to apply a portion of the receive if. signal to the base of if. amplifier 1A7Q7 through coupling capacitor 1A7C21. The output of if. amplifier 1A7Q7 is coupled by interstage transformer 1A7T5 to the base of if. amplifier 1A7Q8. Interstage transformer 1A7T5 is tuned to 455 kHz to provide frequency selectivity. The positive portion of the receive if. signal is detected by agc detector 1A7CR7 and applied to amplifier 1A7Q9. The output of amplifier 1A7Q9 is applied through buffer amplifier 1A7Q10 to base bias resistors 1A7R3, 1A7R7, and 1A7R11 of the first three receive if. amplifiers, 1A7Q1 through 1A7Q3, and through choke 1A7L3 to pin F of connector 1A7J20. Capacitor 1A7C34, across the emitter of amplifier 1A7Q9, averages the detected positive peaks to a level that is proportional to the received signal level. The gain of buffer amplifier 1A7Q10 is determined by the position of RF GAIN control 1R10 (fig. 6–12 ①).

b. Transmit.

(1) *If. Amplifier.* During transmit, +12 Vdc is applied from pin A of connector 1A7J20 through choke 1A7L5 to forward bias diodes 1A7CR3 and 1A7CR4 and to energize transmit if. amplifier 1A7Q6. The transmit 455 kHz if. signal from frequency mixer 1A8 is coupled from connector 1A7J22 through coupling capacitor 1A7C25, forward biased diode 1A7CR4, and coupling capacitor 1A7C36 to the base of transmit if. amplifier 1A7Q6. The output of transmit if. amplifier 1A7Q6 is coupled through transformer 1A7T7, forward biased diode 1A7CR3, and coupling capacitor 1A7C20 to terminal 1A7E167. Transformer 1A7T7 is tuned to 455 kHz to provide frequency selectivity.

(2) *Alc.* The gain of transmit if. amplifier 1A7Q6 is controlled by the alc signal applied to pin H of connector 1A7J20 from limiter 1A14 and by the position of alc adjust control 1A7R35. The alc signal, derived from monitoring the output level of the transmitted signal, is used to reduce the gain of transmit if. amplifier 1A7Q6 when the transmitted output level exceeds a predetermined level.

1–20. Frequency Mixer 1A8
(fig. 6–19)

Frequency mixer 1A8 is a bidirectional assembly used to detect and amplify the audio signals from the received rf signal (converted down to the 455 kHz if. signal) and to modulate a 455 kHz injection signal with the desired audio intelligence for transmission. Frequency mixer 1A8 also provides a 1 kHz tone and keyline hold circuitry for cw transmissions. This assembly consists of a diode ring modulator/detector, an am. detector, audio amplifiers, a 1 kHz oscillator, and a cw keyline hold circuit. Signal flow routing is controlled by forward and reverse biased diodes in the signal path. Diode control is provided by the +12 V recv/grd xmit, +12 V xmit/grd recv, and +12 V am. control lines.

a. Receive.

(1) *Ssb.* In the ssb receive mode, the receive 455 kHz if. output signal, applied at connector 1A8J25 from if. amplifier 1A7, is coupled through capacitor 1A8C19, forward biased diode 1A8CR2, and capacitor 1A8C69 to the base of if. amplifier 1A8Q10. The output of 1A8Q10 is applied, through transformers 1A8T8 and 1A8T7, to the diode ring modulator/detector. Transformers 1A8T8 and 1A8T7, tuned to 455 kHz, provide frequency selectivity. The 455 kHz injection amplifier 1A8Q9 applies an unmodulated 455 kHz carrier injection signal to the diode ring modulator/detector. The diode ring modulator/detector mixes the two input signals resulting in an output signal that is the sum and difference of the two frequencies. The difference of the two signals is selected by the low-pass filter consisting of capacitors 1A8C56, 1A8C57, and inductor 1A8L2. The output of the low-pass filter, the desired audio signal, is coupled through capacitors 1A8C53 and 1A8C32 to the base of first audio amplifier 1A8Q7. The output of 1A8Q7 is further amplified by second audio amplifier 1A8Q8. The output of 1A8Q8 is coupled through transformer 1A8T5 to connector 1A8J23. From 1A8J23 the audio signal is applied to REMOTE connector 1J3. An output from the primary center tap of transformer 1A8T5 is applied through coupling capacitor 1A8C34 and connector 1A8J23 to RECEIVE AUDIO control 1R20 (fig. 6–12①). Control 1R20 is adjusted by the operator to supply a portion of the local audio output signal to af amplifier 1A16 for the necessary amplification to drive front panel speaker 1LS1.

(2) *Am.* In the am. receive mode, the receive 455 kHz if. output signal, applied at connector 1A8J25 from if. amplifier 1A7, is applied through coupling capacitor 1A8C19, series resistor 1A8R45, and forward biased diode 1A8CR3 to the base of am. amplifier 1A8Q3. Diode 1A8CR3 is forward biased by the +12 V am. signal through resistor 1A8R20. Am. detector 1A8CR4 detects the audio signal from the receive 455 kHz if. signal at the collector of am. amplifier 1A8Q3. Am. amplifier 1A8Q3 is tuned by inductor 1A8L4 and capacitor 1A8C21. The detected audio signal is applied through series resistor 1A8R22 and coupling capacitor 1A8C32 to the base of first audio amplifier 1A8Q7 where it is also amplified as described in (1) above. The 455 kHz carrier injection signal is disabled at frequency mixer 1A3 to prevent any mixing of the received audio signal with the 455 kHz carrier injection signal.

b. Transmit.

(1) *Voice.* During the transmit mode, input audio signals applied at pin P of connector 1A8J23 are coupled through capacitor 1A8C25 to the base of transmit audio amplifier 1A8Q4. Amplifier 1A8Q4 is energized by application of +12 V xmit signal at pin Y of connector 1A8J23. The output signal from transmit audio amplifier 1A8Q4 is applied through coupling capacitor 1A8C53 and

the low-pass filter formed by capacitors 1A8C56, 1A8C57, and inductor 1A8L2 to the diode ring modulator/detector where it modulates the 455 kHz injection signal. The 455 kHz injection signal, supplied by frequency mixer 1A4, is applied through connector 1A8J24, coupling capacitor 1A8C50, 455 kKz injection amplifier 1A8Q9, and transformer 1A8T6 to the input of the diode ring modulator/detector. The modulated output signal of the diode ring modulator/detector, a double sideband signal consisting of two 455 kHz sideband signals with the 455 kHz injection signal balanced out, is coupled through transformer 1A8T7, forward biased diode 1A8CR14, capacitor 1A8C69, forward biased diode 1A8CR2, and capacitor 1A8C19 to connector 1A8J25. From connector 1A8J25, the double sideband signal is applied to if. amplifier 1A7. The level of the audio input signal applied to transmit audio amplifier 1A8Q4 is determined by the setting of front panel TRANSMIT AUDIO control 1R19. This control is adjusted by the operator to set the output level at 100 watts The audio input signals are applied to TRANSMIT AUDIO control 1R19 from pin F of connector 1A8J23. Remote transmit audio is applied to pin F of connector 1A8J23 through impedance matching transformer 1A8T3. When a carbon microphone is used, the transmit audio signal is applied through pin B of connector 1A8J23, capacitor 1A8C24, series resistor 1A8R48, and transformer 1A8T3 to pin F of connector 1A8J23. Audio signals from a dynamic microphone are applied directly to pin F of connector 1A8J23.

(2) *Cw.* During the cw transmit mode, a 1 kHz tone generated by 1 kHz oscillator 1A8Q5 is applied through series resistor 1A8R34 to pin F of connector 1A8J3. Oscillator 1A8Q5 is energized when a closure to ground is applied to pin C of connector 1A8J23 through the cw key. The closure also forward biases diode 1A8CR6. Diode 1A8CR6 allows cw hold transistor 1A8Q6 to turn on and ground the transmit keyline at pin A of connector 1A8J23. For normal cw key spacing, transistor 1A8Q6 to turn on and ground the transmit keyline at pin A of connector 1A8J23. For normal cw key spacing, transistor 1A8Q6 keeps the transmitter keyed for approximately one-half second after the key is released.

1-21. Rf Oscillator 1A9

(fig. 1-6)

a. General. Rf oscillator 1A9 provides a variable output frequency for tuning the rt unit between each even 10 kHz channels. Front panel 1 kHz FREQUENCY KILOCYCLES control activates the assembly when it is pulled out of the detent. Rotation of the control adjusts a variable tuning capacitor to provide a change in the output frequency. The variable output frequency of rf oscillator 1A9 replaces the fixed output frequencies of rf oscillator 1A13, which is de-activated during continuous tuning. Also, in frequency mixer 1A4, the 1.1015 MHz output frequency provided by mixing the output of rf oscillator 1A13 and the 1 kHz spectrum (also de-activated) from synthesizer 1A2 is replaced by a 1.1015 MHz crystal oscillator 1A4Q6. Crystal oscillator 1A4Q6 is activated with rf oscillator 1A9.

b. Oscillator. Rf oscillator 1A9 consists of transistor oscillator 1A9Q1/1A9Q2, feedback amplifier 1A9Q3, and amplifier 1A9Q4. The output frequency is determined by the value of the LC circuit that is connected to the base of transistor 1A9Q1. Variable capacitor 1A9C13, adjusted by the 1 kHz FREQUENCY KILOCYCLES control, tunes the LC circuit across the frequency range of 788.5 kHz to 798.5 kHz. A portion of the output signal from transistor 1A9Q2 is coupled to the base of feedback amplifier 1A9Q3 and to the base of amplifier 1A9Q4. The amplitude of the signal applied to feedback amplifier 1A9Q3 is determined by the position of feedback adjust potentiometer 1A9R7. The output of feedback amplifier 1A9Q3 is applied to the tuned LC circuit to sustain oscillation. Amplifier 1A9Q4 provides the final amplification of the output signal. Transformer 1A9T1 couples the output of 1A9Q4 to frequency mixer 1A3.

1-22. Rf Oscillators 1A10, 1A11, 1A12, and 1A13

a. General. In the frequency conversion scheme, the four crystal-controlled rf oscillators, 1A10, 1A11, 1A12, and 1A13, provide the necessary frequencies for frequency mixing in the two error mixer assemblies, 1A3 and 1A4, and in translator 1A6. The output of each rf oscillator, determined by the positions of the FREQUENCY KILOCYCLES controls, reflect the selected operating frequency (table 1-1).

b. Rf Oscillator 1A10 (fig. 1-7). Rf oscillator 1A10 consists of 13 crystals (3.247 to 15.247 MHz in 1 MHz increments), oscillator amplifier 1A10A1Q1, buffer amplifier 1A10A1Q2, and associated circuitry. The crystal, selected by 1000 kHz FREQUENCY KILOCYCLES control, resonates

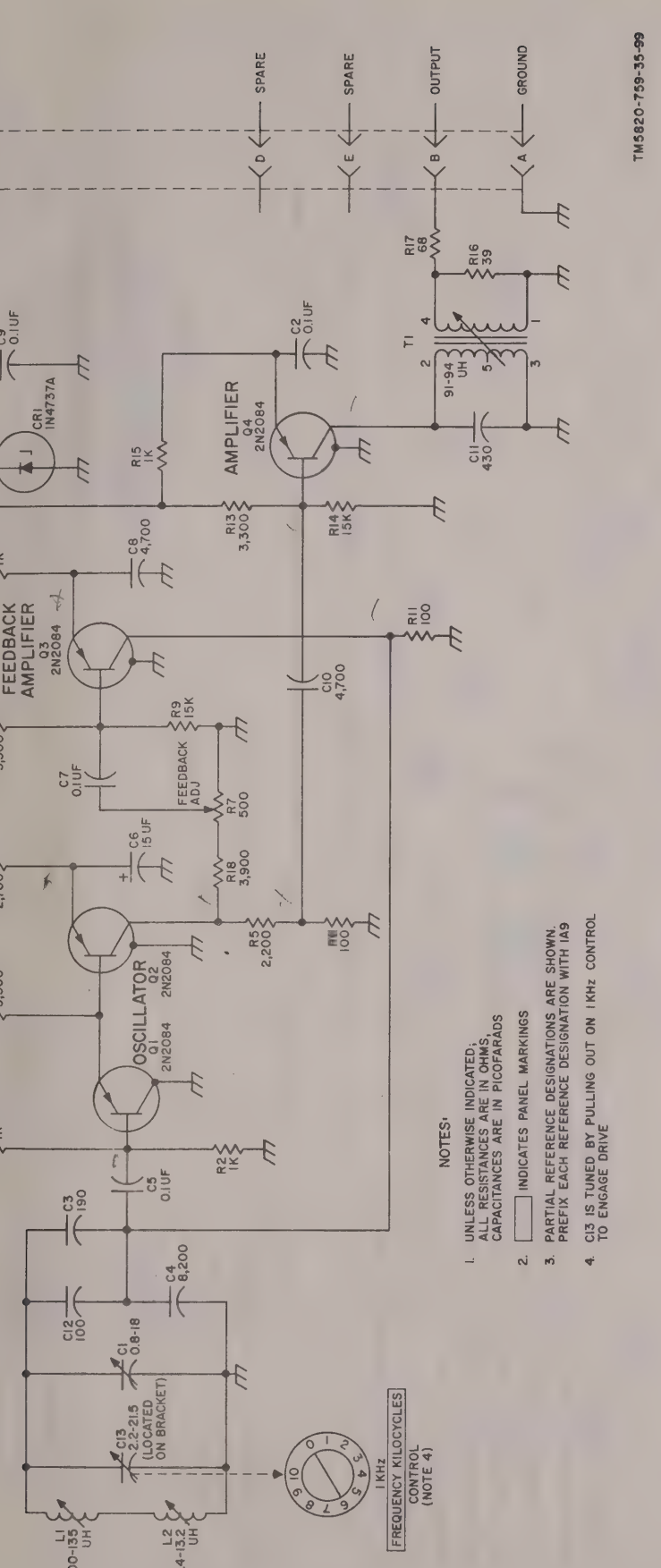
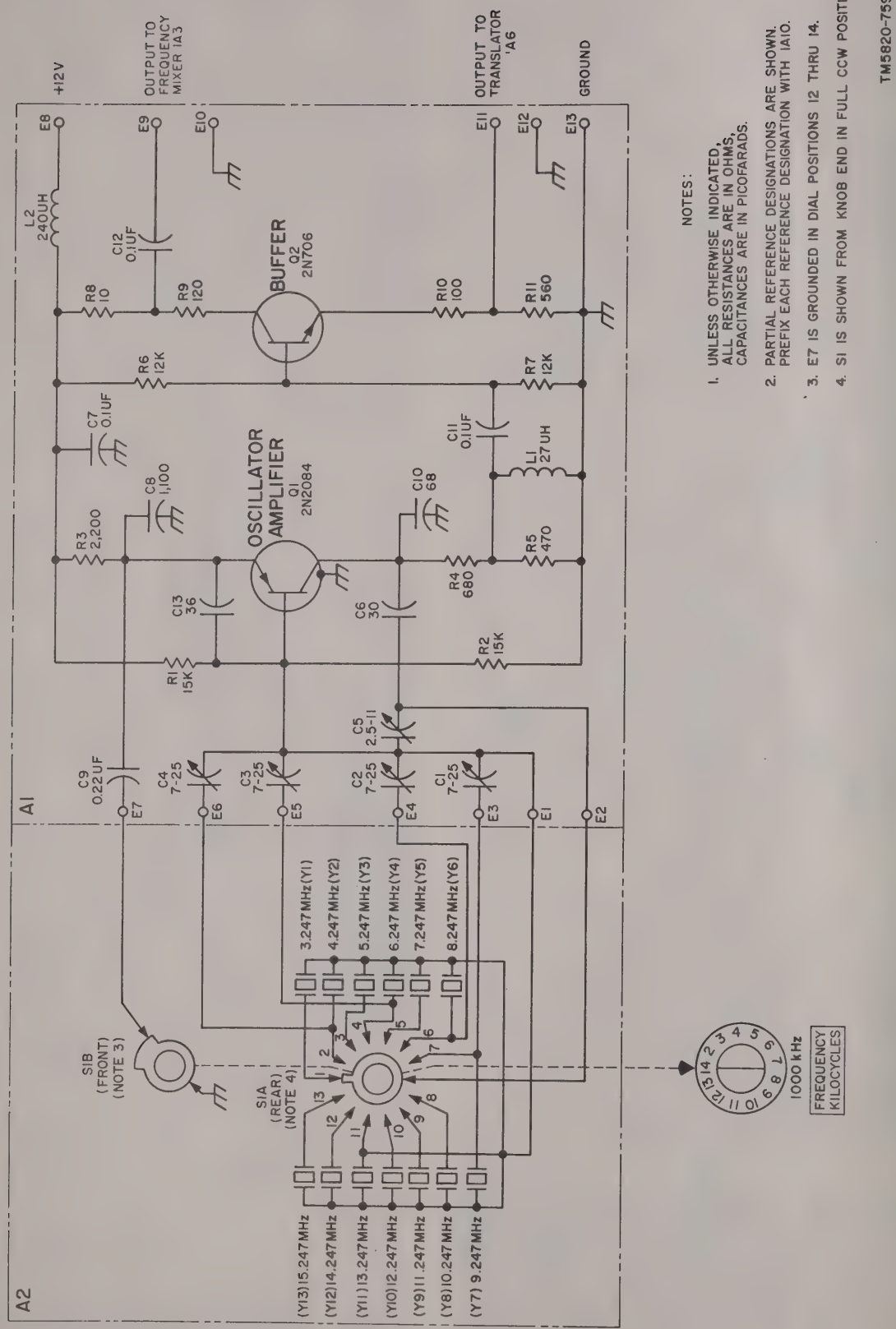


Figure 1–6. Rf oscillator 1A9, schematic diagram.



NOTES:

1. UNLESS OTHERWISE INDICATED, ALL RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN PICOFARADS.
2. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. PREFIX EACH REFERENCE DESIGNATION WITH 1A10.
3. E7 IS GROUNDED IN DIAL POSITIONS 12 THRU 14.
4. S1 IS SHOWN FROM KNOB END IN FULL CCW POSITION.

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Figure 1-7. Rf oscillator 1A10, schematic diagram.

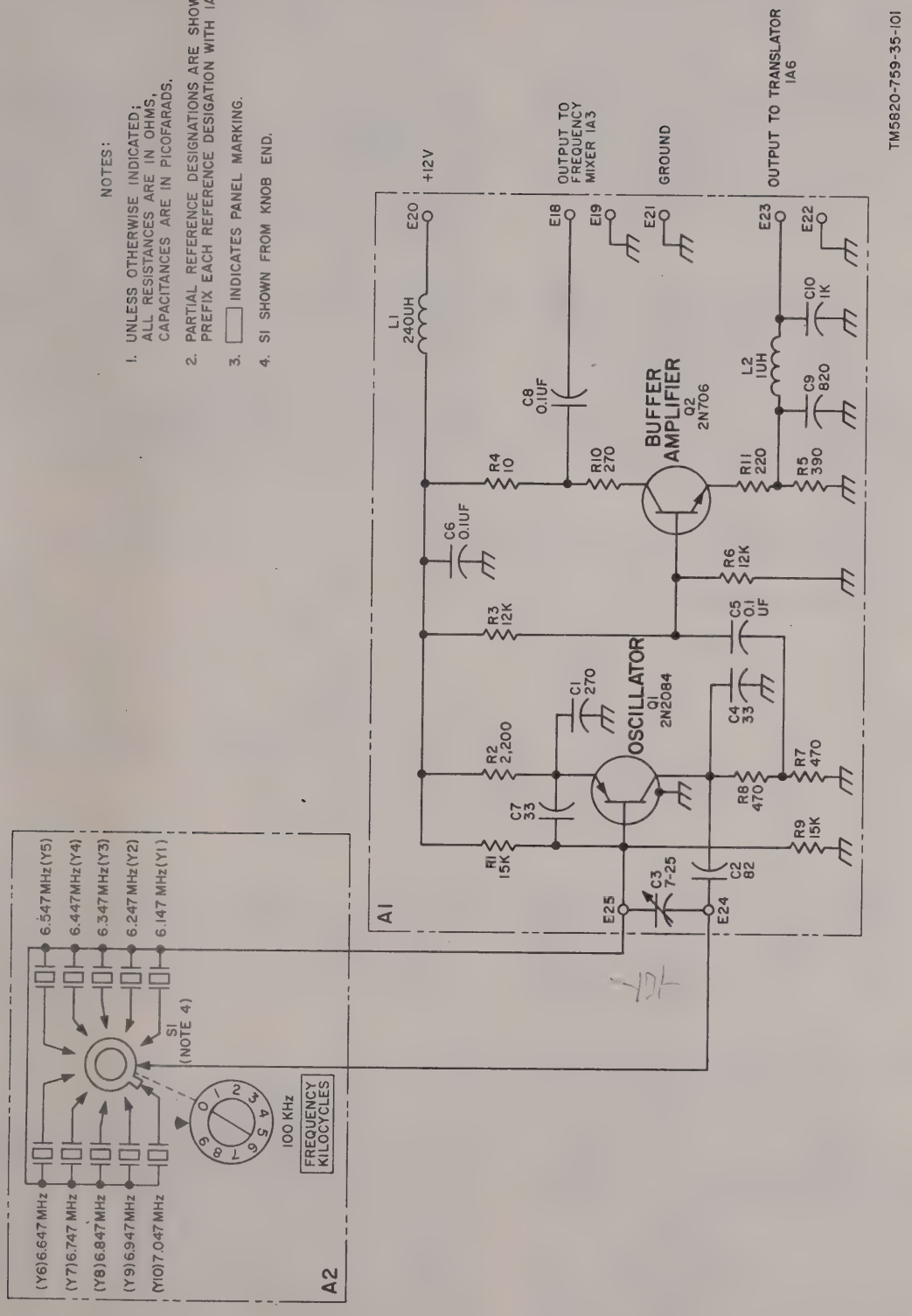


Figure 1-8. Rf oscillator 1A11, schematic diagram.

in parallel with trimmer capacitor 1A10A1C5 in a base-to-collector feedback loop at oscillator amplifier 1A10A1Q1. Buffer amplifier 1A10A1Q2, ac coupled through capacitor 1A10A1C11 to the collector of transistor 1A10A1Q2, provides two outputs, one from the collector and one from the emitter. The collector signal is applied through resistor 1A10A1R9, capacitor 1A10A1C12, and terminal 1A10A1E9 to frequency mixer 1A3. The emitter signal current flows through resistor 1A10A1R11 and the signal developed across 1A10A1R11 is applied to terminal 1A10A1E11, to translator 1A6.

c. Rf Oscillator 1A11 (fig. 1–8). Rf oscillator 1A11 consists of 10 crystals (6.147 MHz to 7.047 MHz in 100 kHz increments), oscillator amplifier 1A11A1Q1, buffer amplifier 1A11A1Q2, and associated circuitry. This oscillator functions in the same manner as rf oscillator 1A10 as described in *b* above, except that the crystals are selected by the 100 kHz FREQUENCY KILOCYCLES control. Two outputs are provided, one from terminal 1A11A1E18 and one from terminal 1A11A1E23. The output from terminal 1A11A1E18 is applied to frequency mixer 1A3 while the output at terminal 1A11A1E23 is applied to translator 1A6.

d. Rf Oscillator 1A12 (fig. 1–9). Rf oscillator 1A12 consists of 10 crystals (1.7565 MHz to 1.8465 MHz in 10 kHz increments), oscillator amplifier 1A12A1Q1, buffer amplifier 1A12A1Q2, and associated circuitry. The crystal, selected by 10 kHz FREQUENCY KILOCYCLES control, resonates in series with capacitor 1A12A1C2, providing feedback between the emitters of buffer amplifier 1A12A1Q2 and oscillator amplifier 1A12AQ1. The output of oscillator amplifier 1A12A1Q1 is dc coupled to the base of buffer amplifier 1A12A1Q2 which in turn provides two outputs, one from the collector and one from the emitter. From the collector, the output is applied

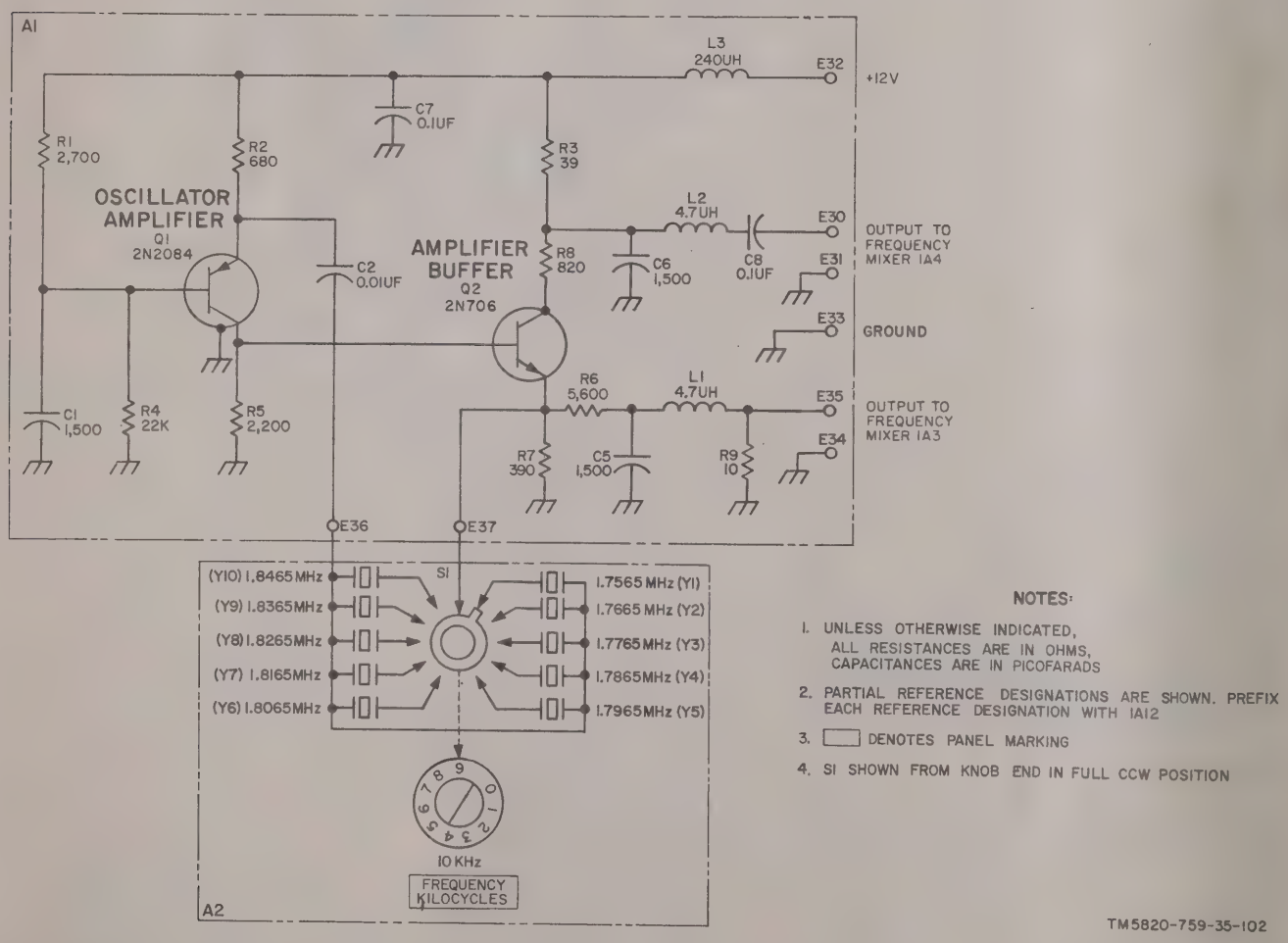


Figure 1–9. Rf oscillator 1A12, schematic diagram.

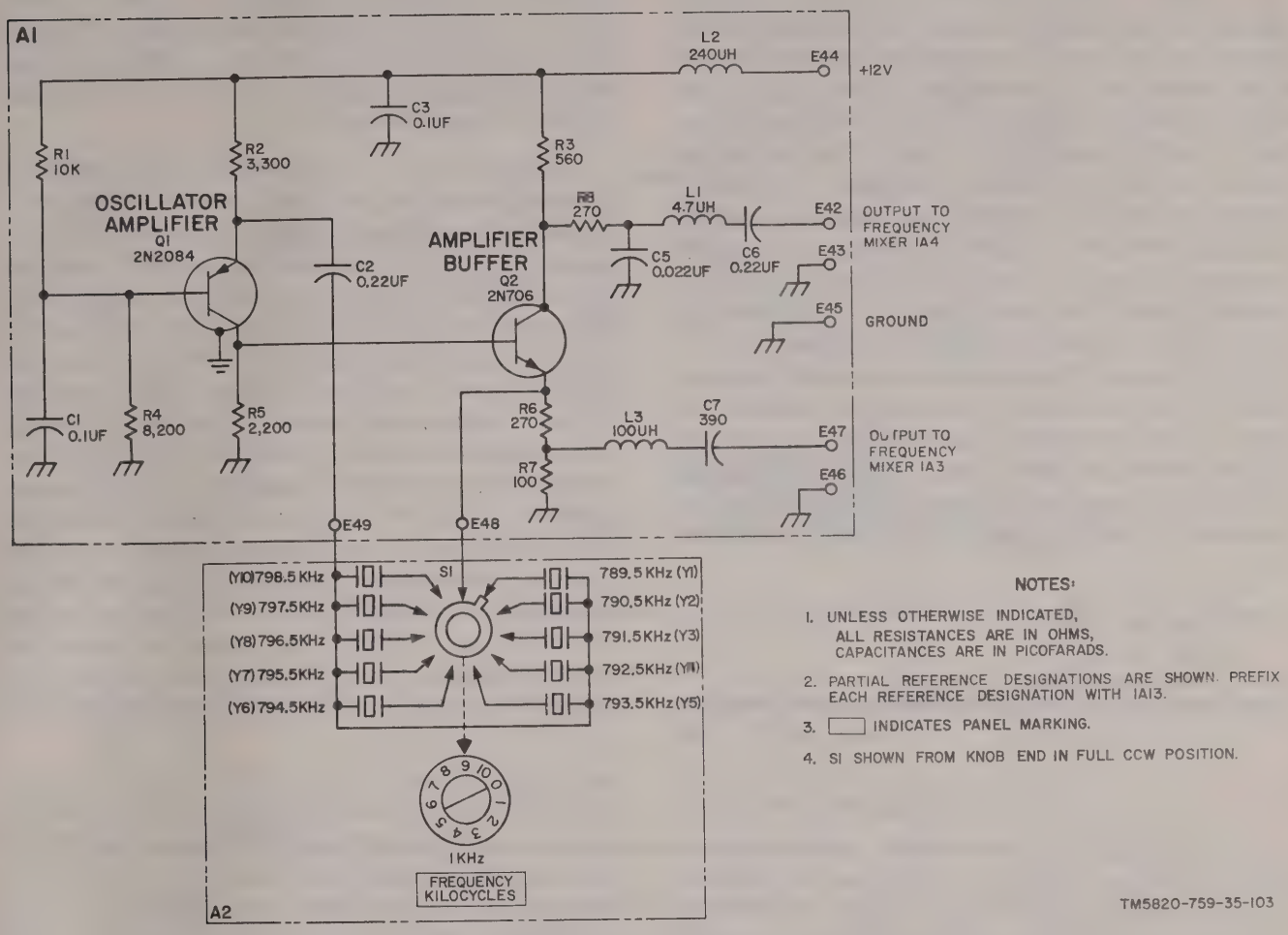


Figure 1–10. Rf oscillator 1A13, schematic diagram.

through resistor 1A12A1R8, inductor 1A12A1L2, capacitor 1A12A1C8, and terminal 1A12A1E30 to frequency mixer 1A4. The output from the emitter is applied through resistor 1A12A1R6, inductor 1A12A1L1, and terminal 1A12A1E35 to frequency mixer 1A3.

e. Rf Oscillator 1A13 (fig. 1–10). Rf oscillator 1A13 consists of 10 crystals (789.5 kHz to 798.5 kHz in 1 kHz increments), oscillator amplifier 1A13A1Q1, buffer amplifier 1A13A1Q2, and associated circuitry. This oscillator functions in the same manner as described in *d* above, except that the crystals are selected by the 1 kHz FREQUENCY KILOCYCLES control, and is disabled when the 1 kHz FREQUENCY KILOCYCLES control is pulled out for vfo tuning (para 1–21). Buffer amplifier 1A13A1Q2 provides two outputs, one from the collector and one from the emitter. The collector output is applied through resistor 1A13A1R8, inductor 1A13A1L1, capacitor 1A13A1C6, and terminal 1A13A1E42 to frequency mixer 1A4. From the emitter, the output is applied through resistor 1A13A1R6, inductor 1A13A1L3, capacitor 1A13A1C7, and terminal 1A13A1E47 to frequency mixer 1A3.

1–23. Limiter 1A14
(fig. 1–11)

a. Limiter 1A14 provides the automatic level control (alc) signal to limit the drive at the grids of power amplifier tubes 1V1, 1V2, and 1V3. The alc signal is applied to if. amplifier 1A7 to reduce the gain of the transmit if. amplifier stage when a large drive signal is applied to the power amplifier. Without alc, the normal class AB_1 bias of the tubes would change whenever appreciable amounts of grid currents accrued from large modulation peaks. This would result in excessive distortion of the output transmitter signal.

b. Limiter 1A14 consists of buffer amplifier 1A14Q1 and transistor switch 1A14Q2 with interstage coupling transformer 1A14T1. Rectification of the peaks of the modulated rf drive signal by diode 1A14CR1 develops a negative pulse at the base of buffer amplifier 1A14Q1. The output of buffer amplifier 1A14Q1 triggers transistor switch 1A14Q2 into conduction. Transistor switch 1A14Q2 transfers a portion of the charge on capacitor 1A14C6 to capacitor 1A14C7 for each detected pulse. The time constant of the discharging circuit is greater than the charging circuit, thus a voltage is developed across 1A14C7 proportional to the recurrence rate of the modulating pulses. This dc voltage is applied to if. amplifier 1A7 to reduce the drive signal level at the power amplifier. Adjustment of the acl threshold level is provided by potentiometer 1A7R35 in if. amplifier 1A7.

1–24. Limiter 1A15

(fig. 1–12)

a. During am. transmit, limiter 1A15 provides the automatic carrier control (acc) signal to regulate the re-inserted carrier signal level. Regulation is necessary to provide a uniform carrier level to the power amplifier over the operating frequency range of the rt unit.

b. Limiter 1A15 consists of an input detection network, a buffer amplifier, and a dc amplifier. The input detection network (diode 1A15CR1, capacitor 1A15C1, and resistor 1A15R1), removes the modulation from the input signal supplied by the power amplifier cathode circuitry and applies a dc voltage proportional to the carrer signal level to buffer amplifier 1A15Q1. Buffer amplifier 1A15Q1 applies this voltage to the base circuitry of dc amplifier 1A15Q2. Capacitor 1A15C2 (in the emitter circuit of buffer amplifier 1A15Q1) averages the signal for long time stability. Dc amplifier 1A15Q2 increases the signal voltage level and applies it to terminal 1A15J28 pin E. The gain of dc amplifier 1A15Q2 is set by am. carrier adjust potentiometer 1A15R6. The output dc voltage at pin E is applied directly to carrier re-insert signal amplifier 1A4Q7 located in frequency mixer 1A4.

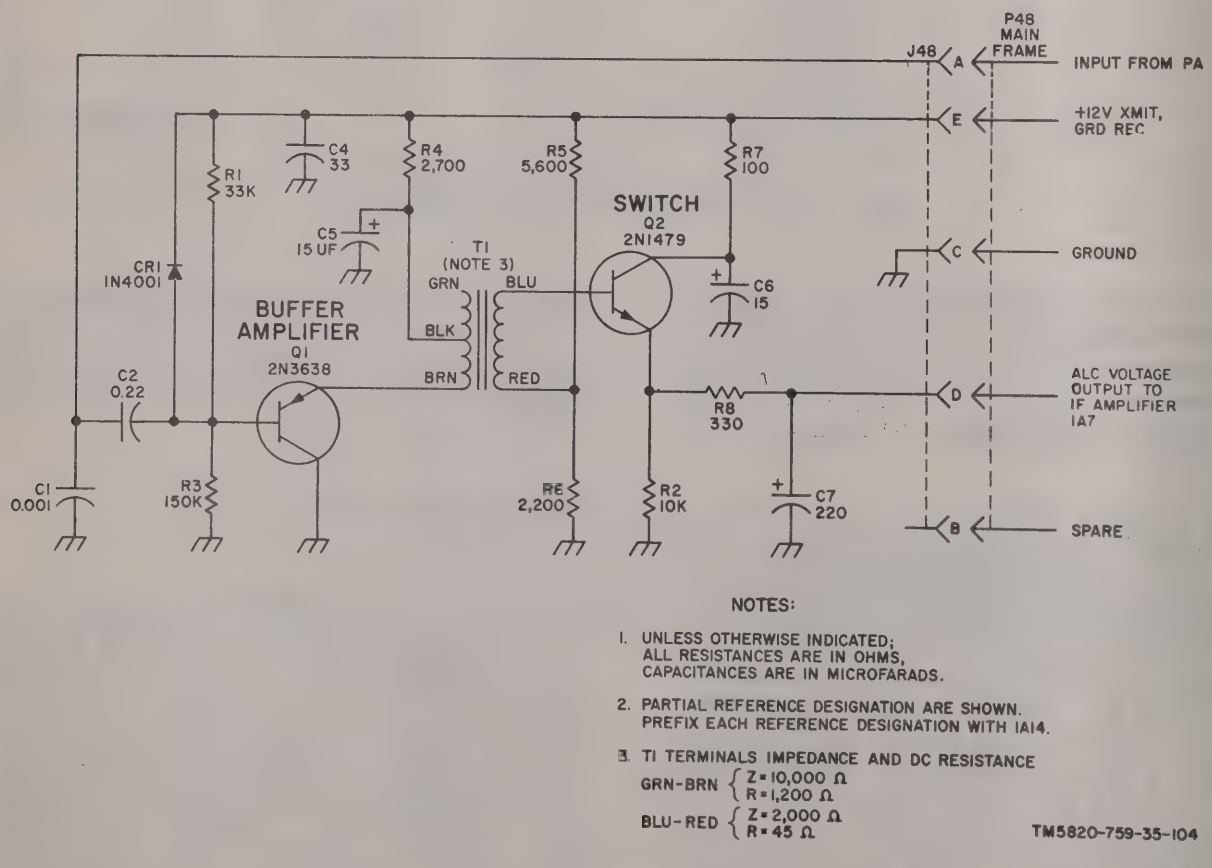


Figure 1–11. Amplifier–Limiter 1A14, schematic diagram.

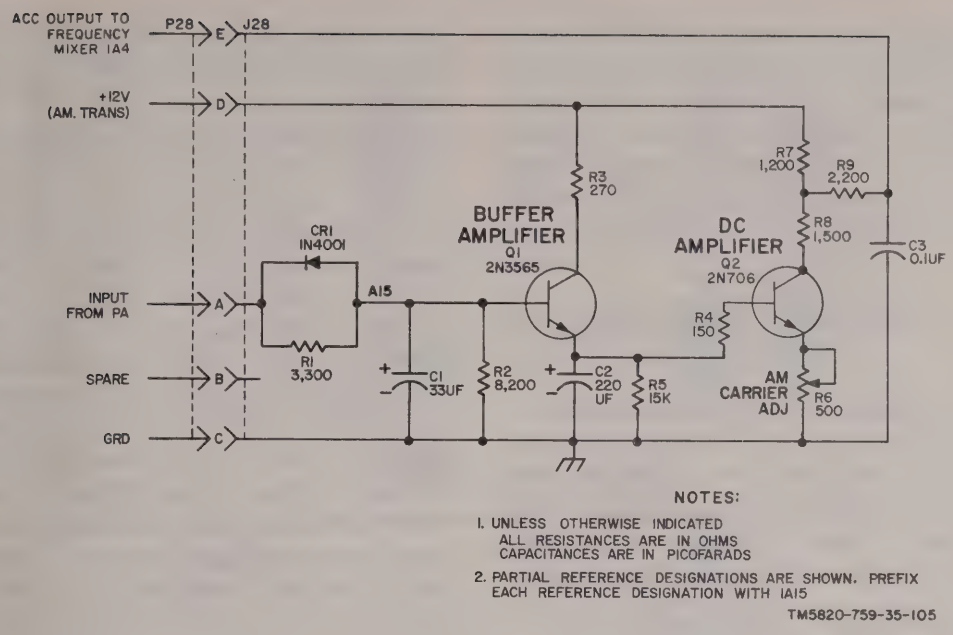


Figure 1–12. Amplifier-Limiter 1A15, schematic diagram.

1–25. Af Amplifier 1A16
(fig. 1–13)

a. Af amplifier 1A16 provides the necessary amplification of the audio output signal, from frequency mixer 1A8, to drive front panel speaker 1LS1. The level of the input signal, supplied during receive and cw transmit, is controlled by front panel RECEIVE AUDIO control 1R20. Af amplifier 1A16 consists of a voltage amplifier, a complementary driver stage, and a complementary output stage.

b. Transistors 1A16Q1 and 1A16Q2 form the input voltage amplifier stage. The audio signal from frequency mixer 1A8 is applied through pin A of connector 1A16J26 and capacitor 1A16C1 to base of transistor 1A16Q1. The output, taken from the collector of 1A16Q2, is applied directly to the base of 1A16Q3 and through diode 1A16CR1 and resistor 1A16R6 to the base of 1A16Q4. Transistors 1A16Q3 and 1A16Q4 form the complementary driver stage. Diode 1A16CR1 provides temperature compensation and establishes the quiescent current level for 1A16Q3 and 1A16Q4. The output of the complementary driver stage is direct coupled to the bases of transistors 1A16Q5 and 1A16Q6, the complementary output stage. The amplified output of this stage is applied through capacitor 1A16C4 and pin C of connector 1A16J26 to front panel speaker 1LS1. Resistor 1A16R7 provides feedback from the complementary output stage to the input of the complementary driver stage.

1–26. Rf Oscillator 1A17

Rf oscillator 1A17 is a hermetically sealed assembly that supplies the 1 MHz frequency standard that is used to establish the rt unit operating frequency accuracy. The assembly, a self contained oscillator mounted in a controlled temperature oven, provides an output signal that is stable to within one part in 10^6 per month. Controls are provided to adjust the output frequency and amplitude (an illustration of rf oscillator 1A17 has not been provided).

1–27. Electronic Chopper 1A18A, or 1A18B

a. General. Electronic chopper 1A18 is a square wave oscillating inverter that produces an ac voltage from a dc power source. The dc voltage of the primary source dictates which one of two available electronic choppers is installed in the rt unit. The Electronic, Chopper CV–2486/URC (fig. 1–15) 1A18B is used for operating from a 26 Vdc ±10% primary source, while the Electronic Chopper CV–2487/URC (fig. 1–14) 1A18A is used with a 13.5 Vdc ±10% primary source. The rt unit can also be operated from an ac power source by connecting the ac power cable and setting power selector switch 1A1 at ac. In operation, the two electronic choppers are identical.

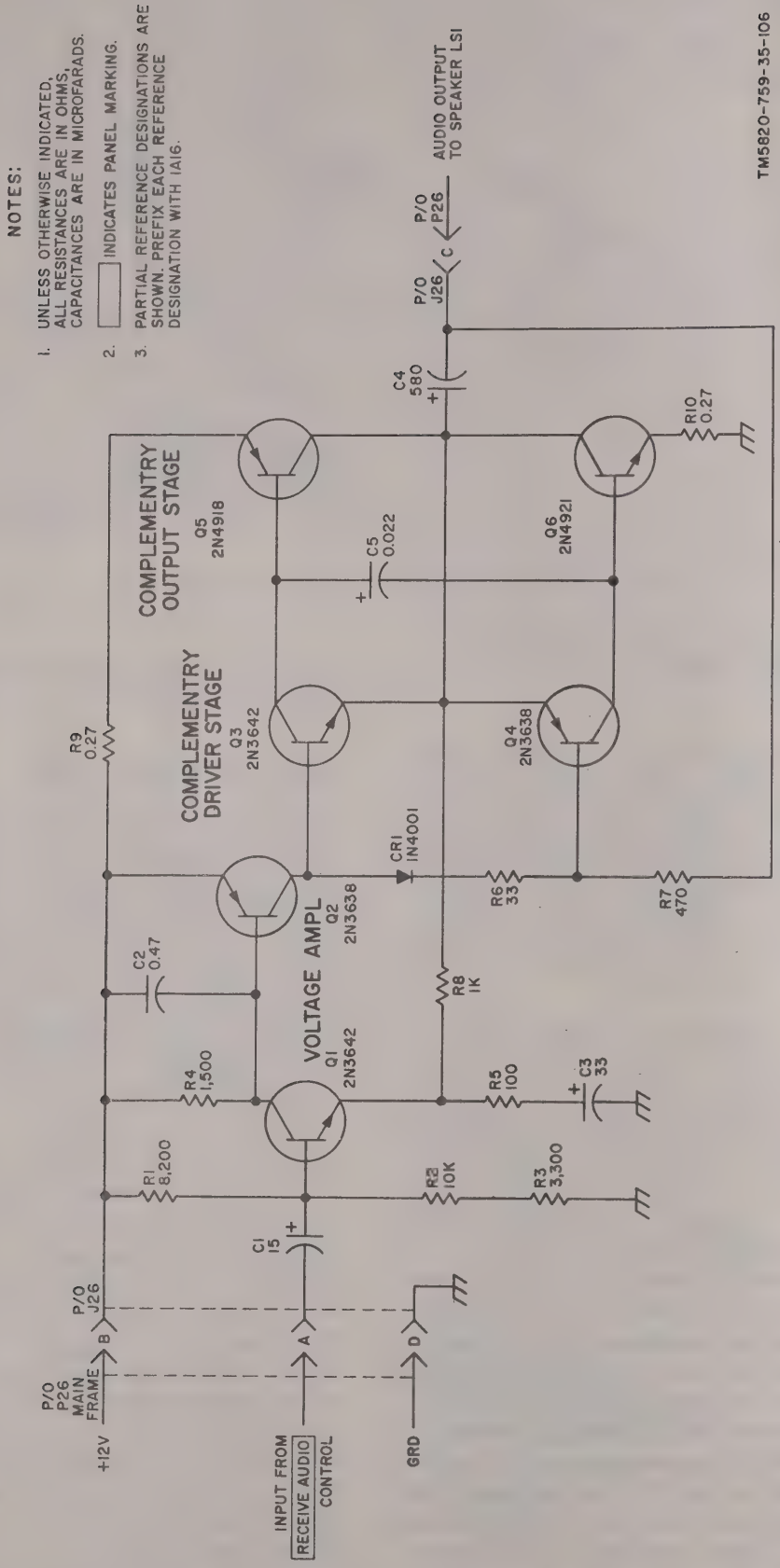


Figure 1-18. Af Amplifier 1A16, schematic diagram.

b. 13.5 Volt Electronic Chopper (fig. 1–14). The 13.5 volt Electronic Chopper CV–2487/URC operates from a 13.5 Vdc ±10% primary power source and consists of two switching transistors 1A18Q1 and 1A18Q2, saturable core transformer 1A18T1, relay 1A18K1, and associated circuitry. The dc return path for the collectors of each transistor is through the end terminals of the center tapped primary winding of power transformer 1T1. The primary winding center tap is connected to the dc return line. As each transistor alternately conducts, the primary dc voltage is switched first through one half and then the other half of the primary winding of power transformer 1T1. This switching action generates an ac voltage that is rectified to provide the required dc operating voltages. Chopper operation is initiated by energizing relay 1A18K1 which applies the dc voltage to the emitters of transistors 1A18Q1 and 1A18Q2. Inherent differences between the two transistors will cause one to start conducting before the other. As the current starts to flow through one half of the center tapped primary winding of power transformer 1T1, it is coupled back to the primary winding of transformer 1A18T1. At the instant that one transistor starts to conduct, the voltage and current assumes a maximum level. The voltage at transformer 1A18T1 causes the rate of flux change to increase in transformer 1A18T1. This provides forward bias through the secondary winding to the conducting transistor and the reverse bias to the other transistor. This condition continues to exist until the core of transformer 1A18T1 saturates, thereby causing the rate of flux change to drop to zero. During the same time interval, the initially induced voltage at the secondary winding of transformer 1A18T1 first starts to decrease and then quickly drops to zero, removing the forward bias to the conducting transistor. The current in transformer 1A18T1 now starts to decrease, causing the flux to build up in the opposite direction. This provides voltages of opposite polarity in the secondary winding of transformer 1A18T1. The transistor that was initially biased off is now forward biased into conduction while the initially conducting transistor is now biased off. This provides current to flow in the other half of the primary winding of transformer 1T1. This condition will continue until transformer 1A18T1 again saturates, this time with the opposite polarity. The process will then repeat, causing current to flow alternately, first in one half and then the other half of the primary winding of transformer 1T1.

c. 26.0 Volt Electronic Chopper (fig. 1–15). This Electronic Chopper CV–2486/URC operates from a 26.0 Vdc ±10% primary power source. Zener diodes 1A18CR3 and 1A18CR4 limit the collector-emitter voltage of 1A18Q1 and 1A18Q2. With the exception of these two diodes, the operation is identical to the CV–2487/URC explained in *b* above.

1–28. Filter Assembly 1A19

(fig. 6–12 ②)

a. Filter assembly 1A19 consists of two highly selective mechanical sideband filters, 1A19FL5 and 1A19FL6, and associated input/output trimmer capacitors. Both filters function during the receive and transmit modes: filter 1A19FL5 for usb, cw, and am. transmit; filter 1A19FL6 for lsb.

b. Filter 1A19FL5, when selected for usb, cw, or am. transmit, refines the bandwidth of frequencies lower than the 455 kHz carrier if. frequency. However, mixing in translator 1A6 inverts the relationship of the sideband and carrier. The

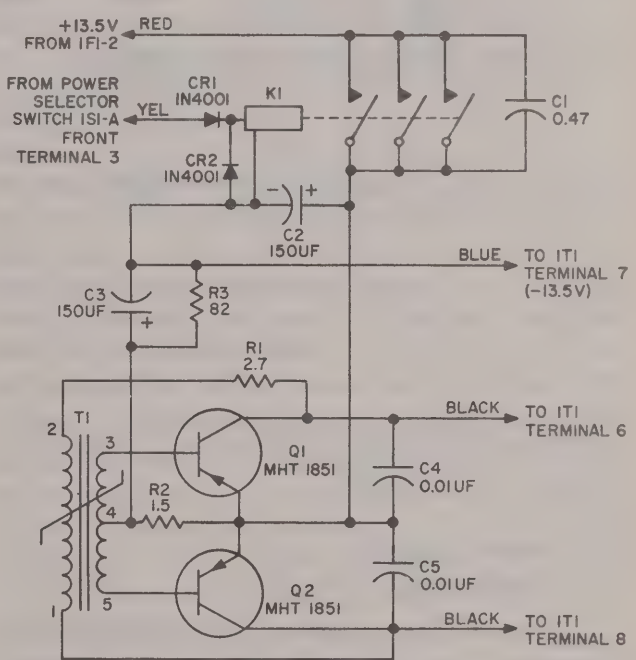


Figure 1–14. Electronic Chopper CV–2487/URC, (1A18A) schematic diagram.

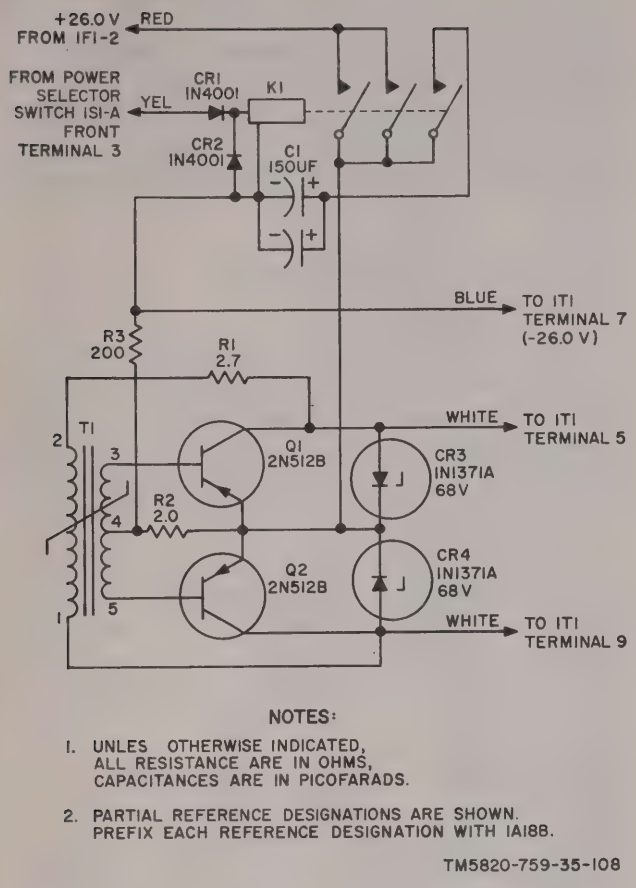


Figure 1–15. Electronic Chopper CV–2486/URC (1A18B), schematic diagram.

effect on received and transmitted signals is that the upper sideband is filtered and the lower sideband signal is blocked. In the same manner filter 1A19FL6 in the lsb mode refines the bandwidth of frequencies higher than the carrier if. frequency and blocks those frequencies higher than the carrier if. frequency.

1–29. Power Supply
(fig. 6–12 ①)

a. General. The power supply, mounted on the rt unit main frame, provides the necessary operating voltages: 900 Vdc, 225 Vdc, 12 Vdc, —55 Vdc (approximately), and 6.3 Vac. It consists of a power transformer, two silicon diode bridge rectifiers, one full-wave diode rectifier, one half-wave diode rectifier, a Zener diode voltage regulator, and necessary filter circuits. Primary power is applied at connectors 1J1 (ac) or 1J2 (dc). Input power is applied to power selector switch 1S1, which selects the input power, either 115 Vac, 230 Vac, or dc. From power selector switch 1S1, the input power is routed to power transformer 1T1. Dc power is applied to chopper 1A18 where it is converted to ac before being applied to power transformer 1T1.

b. 900 Vdc (±15%). Ac voltage from the secondary winding (terminals 18 and 19) of transformer 1T1 is applied to the bridge rectifier formed by diodes 1CR1 through 1CR8. The rectified output is filtered by capacitor 1C1, inductor 1L4–B, and capacitor 1C2. The filtered voltage is then routed to the plate circuits of power amplifier tubes 1V1, 1V2, and 1V3 (fig. 6–12 ②).

c. 225 Vdc (±15%). Ac voltage from the center-tapped secondary winding (terminals 15, 16, and 17) of transformer 1T1 is applied to the full-wave rectifier formed by diodes 1CR9 and 1CR10. The rectified output is filtered by capacitor 1C3–A, inductor 1L4–C, and capacitor 1C3–B. The filtered voltage is routed through the deenergized contacts 9 and 5 of relay 1A20K1 (standby operation relay) to the grid circuits of power amplifier tubes 1V1, 1V2, and 1V3. In standby condition, the filtered voltage is routed through energized contacts 9 and 1 of relay 1A20K1 to load resistor 1A20R5.

d. 12 Vdc (±15%). Ac voltage from the secondary winding (terminals 13 and 14) of transformer 1T1 is applied to the bridge rectifier formed by diodes 1CR13 through 1CR16. The rectified output is filtered by capacitors 1C56 and 1C3–C, inductor 1L4–A, and capacitors 1C3–D, 1C11, and 1C58. The filtered output is routed through deenergized contacts of primary keying relay 1A20K1 to power amplifier transistors 1A20Q1 and 1A20Q2. Capacitive filter 1A20C10 reduces ripple and biases transistor 1A20Q2. Transistors 1A20Q1 and 1A20Q2 are connected so that the emitter of transistor 1A20Q1 is the output of the power supply.

e. —55 Vdc (±15%). Ac voltage from the secondary winding (terminals 15, 16, and 17) of transformer 1T1 is applied to half-wave rectifier diode 1CR11. The rectified output is filtered by capacitor 1C5, resistor 1R3, and capacitor 1C6 and then applied to potentiometer 1A20R4 which is used to adjust the bias level of power amplifier tubes 1V1, 1V2, and 1V3. Zener diode 1A20CR12 maintains the rf amplifier bias voltage at –36 Vdc.

f. 6.3 Vac (±15%). Unrectified and unfiltered ac voltage is applied directly to the filaments of 1V1, 1V2, and 1V3 in the power amplifier.

1–30. Power Amplifier
(fig. 6–12 ②)

a. The power amplifier (pa.), mounted on the main frame, consists of three vacuum tubes with tuned plate circuits and an adjustable pi-network filter in the output. The pa. raises the level of the signal applied to it from rf amplifier 1A1 to an output level of 100 watts in all transmit modes except am., which is 25 watts.

b. The three vacuum tubes, 1V1, 1V2, and 1V3, are connected in parallel in a common cathode configuration and operate in class AB_1. The rf output is coupled to ANTENNA connector 1J4 through a pi-network. The capacitors are pre-selected by the 1000 kHz FREQUENCY KILOCYCLES control. Inductor 1L6, part of the pi-network, is adjusted by the PA TUNE control.

1–31. Meter Circuit
(fig. 6–12 ① and 6–12 ②)

a. Meter amplifier 1Q3 and a detector circuit provide a relative indication of signal strength in the receive mode and a calibrated indication of transmitter power output in the transmit mode. A visual indication is provided by front panel meter 1M1.

b. During the receive mode, the agc output from if. amplifier 1A7 is applied through resistor 1R6, diode 1CR23, and primary keying relay 1A20K2 to front panel meter 1M1.

c. During the transmit mode, rf voltage from ANTENNA connector 1J4 (fig. 6–12 ②) is sampled and attenuated by resistors 1R27 and 1R28, detected by diode 1CR22, and applied to meter amplifier 1Q3. Meter amplifier 1Q3, an emitter follower, directs the voltage through primary keying relay 1A20K2 to meter 1M1.

Section IV. FUNCTIONING OF ANTENNA COUPLER CU–1782–GRC–165

1–32. General

This section contains a description and analysis of the functioning of the antenna coupler. A description of the antenna coupler will be presented first, followed by the functional operation of the unit and circuit analysis of the VSWR bridge and matching networks.

1–33. Description

Antenna Coupler CU–1782/GRC–165 provides a tuneable impedance network for matching the antenna impedance with the 52 ohm output of the rt unit. A front panel meter with the necessary circuitry to indicate forward power and reflected power is provided. The antenna coupler enables the rt unit to operate with antenna AS–2203/GRC–165 and any other unbalanced antenna of nine feet or more in length. When properly matched to an antenna, the antenna coupler provides an input impedance of 52 ohms with a power capacity of 150 watts. The quality of the antenna match is indicated to the operator by the ratio of the forward power to reflected power readings on the front panel meter.

1–34. Functional Operation
(fig. 6–20)

Rf energy from the rt unit is applied to the antenna coupler through the rf transmission line to INPUT connector 2J1. The rf voltage is then applied through voltage standing wave ratio (swr) bridge 2A1 to the impedance matching network. Antenna impedance matching is accomplished by variable inductors 2L1 and 2L2, which are controlled by the FINE TUNE and LOAD control, and a fixed capacitive network selected by switch 2S1, COARSE TUNE. The fixed capacitive network, 2C1, 2C2, 2C3, and 2C4, changes the effective length of the antenna and the load impedance. The variable inductors, 2L1 and 2L2, reduce the reactive components from the rf signal that cause antenna reflected power.

1–35. Swr Bridge 2A1
(fig. 6–20)

a. Swr bridge 2A1 contains toroid transformer 2A1L1 and two rf voltage detecting circuits. The swr bridge produces two dc voltages proportional to the amplitude and direction of the rf signal. Direction of the rf signal is detected by transformer 2A1L1 which uses the input transmission line as its primary winding.

b. Of the dc voltages produced by the swr bridge, one is proportional to the forward rf power and is produced by the current flowing from the rt unit through the transmission line primary of transformer 2A1L1. This voltage is detected by diode 2A1CR1, filtered by rf choke 2A1L2, and applied to the meter 2M1 by the FORWARD POWER contacts of the Meter switch. Trimmer capacitor 2A1C1 allows for calibration of the network.

c. The other dc voltage is proportional to the antenna reflected power and is produced by the current flowing back (reflected) from the antenna through the primary of 2A1L1. This voltage is detected by diode 2A1CR2, filtered by 2A1L3, and applied to meter 2M1 by the REFLECTED POWER contact of the meter switch. Trimmer capacitor 2A1C2 allows for calibration of the capacitive voltage divider network.

1–36. Impedance Matching Network

The impedance matching network consists of an L-network with shunt inductance and series capacitance. Normally, antenna matching by series inductance 2L2 alone is not possible. Therefore, in order to match the antenna impedance, COARSE TUNE switch 2S1 must add some shunt capacitances (2C17, 2C18, 2C19, 2C20, and 2C21) to the antenna side of the network to raise the Q of the antenna enough to permit tuning. The LOAD control, series inductance 2L2, cancels the capacitive reactance created by the antenna and shunt capacitors; however, inductor 2L2 itself exhibits a small capacitance which also reduces the SWR. FINE TUNE control, inductor 2L1, presents enough shunt inductance to cancel the capacitance effect of 2L2 so that the electrical appearance of the antenna is purely resistive.

Section V. FUNCTIONING OF CONTROL, RADIO SET C–7648/GRC–165

1–37. General

This section presents the functioning of Control, Radio Set C–7648/GRC–165 (remote control). A description of the remote control is presented first, followed by its functional operation, and a circuit analysis of the audio amplifier.

1–38. Description

The remote control enables remote transmit-receive keying and provides audio inputs and outputs for remote operation with the radio set. The remote control includes an audio amplifier, a self-contained speaker, and a handset. Cable CX–10823/U provides all interunit connections between the rt unit and the remote control for remote operation of the rt unit up to a distance of 92 feet. Primary power, +12 Vdc, is provided by the rt unit to the remote control.

1–39. Functional Operation
(fig. 6–21)

a. Audio signals from the rt unit are applied through terminals 4 and 6 of connector J2, transformer A2T1, and VOLUME control R5. The selected signal level is then amplified in the amplifier, audio assembly A1, amplified and applied to Function switch S1. Function switch S1 selects either the speaker, the handset, or both for the audio output. When the remote control is operated with the handset, Function switch set at HANDSET, the output of the audio amplifier A1 is switched into a dummy load consisting of three 10 ohm resistors connected in parallel, (R1, R2, and R3).

b. During the transmit mode, the keyline ground is carried from the keying source (handset push-to-talk switch, or handkey) to the rt unit. Microphone inputs to the remote control at terminals J1–2 or J1–5 and J1–4, or J1–6 are applied to transformer A2T2.

c. Primary power for the remote control, +12 Vdc, is received from the rt unit through the interconnecting cable. Power is received on terminal J2–9 and is routed to switch S2–A, part of VOLUME control R5, and keyline switch S2–B. When the VOLUME control is set at OFF keyline switch S2–B is open to prevent accidental keying of the rt unit, and S2–A is open to de-energize the audio amplifier.

1–40. Audio Amplifier A1
(fig. 6–21)

This audio amplifier is identical to af amplifier 1A16 which is described in paragraph 1–25.

CHAPTER 2

DIRECT AND GENERAL SUPPORT MAINTENANCE

Section I. DIRECT SUPPORT TROUBLESHOOTING

2–1. General Instructions

The direct support maintenance procedures in this chapter supplement the procedures described in the operator's and organizational maintenance manual (TM 11–5820–759–12). The systematic troubleshooting procedure, which begins with the operational and sectionalization checks that can be performed at the operator's and organizational maintenance level, is carried to a higher level in this chapter. Sectionalizing, localizing, and isolating techniques used in the troubleshooting procedures are more advanced. In this chapter, section I provides functional troubleshooting procedures, and sections II, III, and IV contain intraunit troubleshooting procedures. Sections V and VI contain general support repair and alignment instructions.

2–2. Organization of Troubleshooting Procedures

a. General. The first step in servicing a defective radio set is to sectionalize the fault. Sectionalization means tracing the fault to a major component. The second step is to localize the fault. Localization means tracing the fault to a defective stage or part responsible for the abnormal condition. Some faults such as burned-out resistors, arcing, and shorted transformers can often be located by sight, smell, and hearing; however, the majority of faults, must be isolated by resistance or voltage measurements, or by signal substitution.

b. Sectionalization. The following is a group of tests arranged to reduce unnecessary work and to aid in tracing trouble in a defective radio set. The first step is to locate the unit or units at fault by the following methods:

(1) *Visual inspection.* Visual inspection is used to locate obvious defects without testing or taking circuit measurements.

(2) *Operational tests.* Operational tests frequently indicate the general location of trouble. In many instances, the tests will help in determining the exact nature of the fault. The monthly preventive maintenance checks and services chart in TM 11–5820–759–12 provides a good operational test. Additional operational tests are given in sections II through IV.

c. Localization. After the trouble has been sectionalized (*b* above), the methods in (1) and (2) below will aid in localizing the trouble to a stage or assembly in the suspected unit.

(1) *Assembly troubleshooting procedures.* Test equipment indications, or lack of indications, and operational checks (sec II through IV) provide a systematic method of localizing trouble to a stage or assembly. The trouble symptoms listed in the assembly troubleshooting procedures provide additional information for localizing troubles.

(2) *Signal substitution.* Signal substitution procedures enable the repairman to localize a trouble quickly to a stage or assembly. A signal generator, audio oscillator, and oscilloscope are units of test equipment that may be used in signal substitution procedures. Observe the caution notice in paragraph 2–3 and follow signal substitution procedures closely so that accidental damage to transistors is avoided.

d. Isolation. After the trouble has been localized (*c* above), the methods in (1) and (2) below will aid in isolating the trouble to a defective circuit element.

(1) *Voltage measurements.* This equipment is transistorized. When measuring voltages, use tape or sleeving (spaghetti) to insulate the entire test probe except for the extreme tip. A momentary short circuit will damage certain transistors. Use the same or equivalent multimeter specified.

(2) *Intermittent troubles.* In all of the tests, the possibility of intermittent troubles should not be overlooked. If present, this type of trouble often may be made to appear by tapping or jar-

ring the equipment. Make a visual inspection of the wiring and all connections. Minute cracks in printed circuit boards can cause intermittent operation. A magnifying glass is often helpful in locating defects on printed circuit boards.

2–3. Test Equipment Required

CAUTION

This equipment contains transistor circuits. If any equipment item does not have an isolation transformer in its power supply circuit, connect one in the power input circuit. A suitable transformer is identified by FSN 5950–356–1779.

a. General. Observe the following:

(1) Never connect test equipment (other than multimeter outputs) directly to a transistor circuit; use a coupling capacitor.

(2) Make test equipment connections with care so that shorts will not be caused by exposed test equipment connectors. Tape or sleeve (spaghetti) test probes or clips as necessary to leave as little probe exposed as needed to make contact to the circuit under test.

(3) Make sure that normal loads (such as a headset and a dummy load) are connected to the radio set before applying power.

b. Test Equipment. The following chart lists test equipment authorized direct support personnel for troubleshooting the radio set.

NOTE

Throughout this manual references to Oscilloscope AN/USM–281 apply also to Oscilloscope AN/USM–281A.

Equipment	Qty	Technical manual
Multimeter ME–26(*)/U [a]	1	TM 11–6625–200–15
Voltmeter, Electronic ME–30(*)/U [b].	1	TM 11–6625–320–12
Voltmeter, Electronic, AN/URM–145.	1	TM 11–6625–524–14
Generator, Signal AN/GRM–50	1	TM 11–6625–573–15
Multimeter AN/URM–105	1	TM 11–6625–203–12
Oscilloscope AN/USM–281	1	TM 11–6625–1703–15
Counter, Electronic, Digital Readout, AN/USM–207.	1	TM 11–6625–700–10
Dummy Load, Electrical DA–75/U.	1	TM 11–6625–446–15
Microphone M–143/GR	1	
Probe, Scope HP–11047A	1	
Probe, T–Connector HP–11042A	1	
600 Ohm Fabricated Connector	1	
Tool Kit Electronic Equipment TK–100/G.	1	SC 5180–91–CL–S21
Tool Kit Electronic Equipment TK–105/G.	1	SC 5180–91–CL–R07
Cable W7	1	
Adapter, Coaxial UG–273/U	1	
Adapter, Coaxial UG–201/U	1	

[a] Multimeter ME–26(*)/U includes ME–26A/U, ME–26B/U, ME–26C/U, and ME–26D/U.
[b] Voltmeter, Electronic ME–30(*)/U includes ME–30B/U, ME–30C/U, ME–30E/U, and Voltmeter, Meter ME–30A/U.

Section II. RT UNIT TROUBLESHOOTING

2–4. General

NOTE

Refer to TM 11–5820–759–12 for inter-unit troubleshooting procedures.

This section contains the necessary rt unit troubleshooting procedures for isolation of a fault to a particular assembly or section of the rt unit.

2–5. Procedures

(fig. 6–12 ①, ②)

a. Short Circuit Tests.

(1) *When to check.* When any of the following conditions apply, check for short circuits and correct the trouble before re-applying power to the rt unit.

(*a*) Continuous blowing of primary power fuses, either 1F1, 1F2, or 1A20F3.

(*b*) When abnormal symptoms from operational tests indicate possible power supply troubles.

(2) *Conditions for tests.* To prepare for the short circuit tests perform the following steps:

(*a*) Remove the top and bottom covers from the rt unit (para 2–11*a* and *b*).

(*b*) Disconnect ac and dc power cables.

(*c*) Set Power Selector switch 1S1 to 115 Vac 4A.

(*d*) Set FUNCTION switch at OFF.

(3) *Measurement.*

CAUTION

This equipment is transistorized. Review paragraph 2–3*a* before performing resistance measurement.

Make the resistance measurement indicated in the following chart. If abnormal results are obtained,

make the necessary additional checks to isolate the faulty component. When a faulty component is found, repair or replace before applying power to the rt unit.

(4) *Short circuit chart.*

Point of measurement	Normal indication	Isolating procedures
Between pin 1 and pin 4 on 1J1 with Power Selector switch 1S1 set at 115 Vac 4A, FUNCTION switch set at STBY.	1 ohm	If resistance is low, check for shorted primary winding on 1T1 or shorted connecting wiring. If resistance is infinite, check for open primary winding on 1T1, open fuse 1F2, or open connecting wiring.
Between pin 4 and pin 5 on 1J1 with Power Selector switch 1S1 set at 115 Vac 4A, FUNCTION switch set at OFF.	Infinite	If resistance is finite or zero, check for shorted capacitors 1C13 and 1C15, 1T1 shorted to ground, rf oscillator 1A17 heater shorted to ground, or shorted connecting wiring.
Between pin 1 and pin 5 on 1J1 with Power Selector switch 1S1 set at 115 Vac 4A, FUNCTION switch set at OFF.	Infinite	If resistance is finite or zero, check for shorted capacitor 1C15 or shorted connecting wiring.
Between pin 3 and pin 4 on 1J1 with Power Selector switch 1S1 set at 230 Vac 3A, FUNCTION switch set at STBY.	3 ohms	If resistance is low, check for shorted primary winding on 1T1 or shorted connecting wiring. If resistance is infinite, check for open primary winding on 1T1, open fuse 1F2, or open connecting wiring.
Between terminal 5, 6, or 7 of 1J2 and chassis ground. Power Selector switch set at 115 Vac 4A.	Infinite	If resistance is finite or zero, check for shorted capacitor 1C22.
Between terminal 2, 3, or 4 of 1J2 and chassis ground	Infinite	If resistance is finite or zero, check for shorted capacitor 1C26.
Between terminal 18 and terminal 19 on 1T1. (Positive probe on terminal 18).	47 ohms	If resistance is low, check for shorted diodes 1CR7 and 1CR8. If resistance is high, check for open secondary winding of 1T1.
Between terminal 19 and terminal 18 on 1T1. (Positive probe on terminal 19.)	47 ohms	If resistance is low, check for shorted diodes 1CR1 and 1CR2. If resistance is high, check for open secondary winding of 1T1.
Between terminal 15 and terminal 16 on 1T1. (Positive probe on terminal 15.)	39 ohms	If resistance is low, check for shorted diode 1CR9. If resistance is high, check for open secondary winding of 1T1.
Between terminal 15 and terminal 16 on 1T1. (Positive probe on terminal 16.)	39 ohms	If resistance is low, check for shorted diode 1CR10. If resistance is high, check for open secondary winding of 1T1.
Between terminal 16 and terminal 17 of 1T1. (Positive probe on terminal 16.)	40 ohms	If resistance is low, check for shorted diode 1CR9. If resistance is high, check for open secondary winding of 1T1.
Between terminal 16 and terminal 17 of 1T1. (Positive probe on terminal 17.)	40 ohms	If resistance is low, check for shorted diode 1CR10. If resistance is high, check for open secondary winding of 1T1.
Between terminal 13 and terminal 14 of 1T1	0.4 ohms	If resistance is high, check for open secondary winding of 1T1.
Across 1R1. (Negative probe to ground)	470,000 ohms	If resistance is low, check for shorted capacitors 1C1, 1C2, 1C19. If resistance is high, check for open resistor 1R1.
Across 1C56. (Negative probe to ground)	54,000 ohms	If resistance is low, check for shorted capacitor 1C3.
Across 1C56. (Negative probe to ground)	230 ohms	If resistance is low, check for shorted capacitors 1C3, 1C11, 1C56, and 1C58.
Between emitter of 1A20Q1 and GRD	70 ohms	If resistance is low, check for shorted transistor 1A20Q1.

b. Performance Checks.

(1) *General.* Tests are outlined in the following paragraphs for checking the performance of the rt unit. If a fault or low performance is found, refer to paragraph 2–7*c* for trouble localizing.

(2) *Power connections.* Set Power Selector switch 1S1 to 115 Vac 4A. Using the 115 Vac power cable, connect 1J1 to a 115 Vac, 60 Hz single phase primary power source.

(3) *Test equipment.* Connect the test equipment (para 2–3*b*) as specified for the particular test, refer to figure 2–1.

(4) *Receive test.* With the test equipment connected as shown in figure 2–1 (receive) turn the rt unit on and perform the following checks:

(*a*) Tune rt unit to 3.103 MHz in lsb mode. Set RF GAIN control fully clockwise and peak PRESELECTOR.

(*b*) Set AN/GRM-50 at 1.0 uV output at 3.103 MHz, fine tune frequency for a maximum ME–30(*)/U indication.

(*c*) Record ME–30(*)/U indication in db's.

(*d*) Turn AN/GRM-50 at least 1 MHz off frequency and record the new value on the ME–30(*)/U.

(*e*) The value recorded in step (*d*) above must be at least 10db below the value of step (*c*) above.

(*f*) Return AN/GRM-50 to 3.103 MHz and repeak the ME–30(*)/U indication.

(*g*) Set AN/GRM-50 output to 0.2V and record the ME–30(*)/U indication.

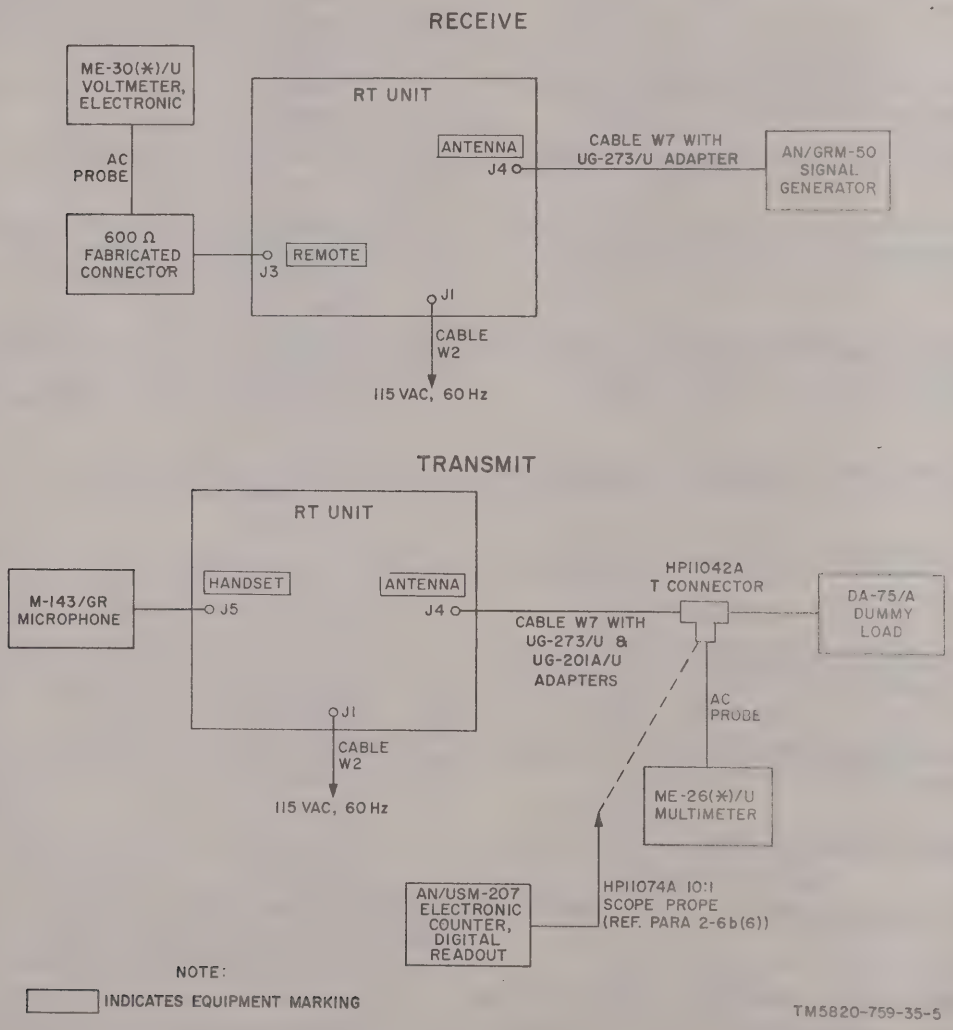


Figure 2–1. Receiver-Transmitter, Radio RT–902/GRC–165, receive and transmit mode test set ups.

(*h*) The value recorded in step (*c*) above must be at least 20db below the value of step (*g*) above.

(*i*) Repeat steps (*b*) through (*e*) above with the rt unit in the usb mode.

(*j*) Tune the rt unit to 3.103 MHz in the am. mode.

(*k*) Set AN/GRM-50 at 3.0 uv output at 3.103 MHz, modulated 30% with a 1,000 Hz tone.

(*l*) Fine tune AN/GRM-50 frequency for a maximum ME–30(*)/U indication. Record ME–30(*)/U indication in db's.

(*m*) Tune AN/GRM-50 at least 1 MHz off frequency and record new value on ME–30(*)/U.

(*n*) The value recorded in (*m*) above must be at least 10db less than the value of (*l*) above.

(*o*) Repeat steps (*a*) through (*n*) above using frequencies of—

2.000 MHz	6.553 MHz	11.263 MHz
2.993 MHz	7.463 MHz	12.864 MHz
3.103 MHz	8.913 MHz	13.760 MHz
4.894 MHz	9.063 MHz	14.996 MHz
5.033 MHz	10.663 MHz	

(5) *Transmit test.* With the test equipment connected as shown in figure 2–1 (transmit) turn on the rt unit and perform the following checks:

(*a*) Set the ME–26(*)/U to the 100 volt ac range.

(*b*) Set rt unit to 3.103 MHz in the cw mode and tune for maximum power output.

NOTE

If necessary, refer to TM 11–5820–759–12 for operating procedures.

(*c*) Using the M-143/GR Microphone, key the rt unit, record the ME–26(*)/U indication, and then unkey the rt unit.

(*d*) A voltage of 71.8 Vac or greater for step (*c*) above is acceptable.

(*e*) Set rt unit to 3.103 MHz in the am. mode and tune for maximum power output.

(*f*) Cover the M-143/GR Microphone to prevent audio modulation and key the rt unit. Record ME–26(*)/U indication and unkey the rt unit.

(*g*) The measured voltage recorded in step (*f*) above must be 37.5 Vac, ±20%.

(6) *Frequency accuracy test.* With the test equipment connected as shown in figure 2–1 (transmit) perform the following checks:

(*a*) At the T connector disconnect the ME–26(*)/U.

(*b*) Connect the AN/USM-207 Counter to the center conductor of the T connector using the HP 11074A 10:1 scope probe. Ground the scope probe to the T connector case.

(*c*) Tune the rt unit to 10.000 MHz in the am. transmit mode and allow 20 minutes for warmup.

(*d*) Using the M-143/GR Microphone (covered to prevent audio modulation) key the rt unit and record the frequency as indicated on the AN/USM-207.

(*e*) The recorded frequency should be 10.000000 MHz ±10 Hz.

c. Localizing Troubles.

(1) *General.* Procedures for localizing troubles to the defective assembly in the rt unit are outlined in the following paragraphs. Parts locations are included in figures 2–2 through 2–6 and 6–10. In many instances, the signal substitution procedures of paragraph 2–5*d* will be required to identify the faulty assembly.

(2) *Use of chart.* The following troubleshooting chart is designed to supplement the operational and performance checks. If previous checks have resulted in reference to a particular item of the chart, then proceed directly with the procedures of that item. If no operational symptoms are known, then start with item 1 and proceed until the trouble is located by the process of elimination. Once an assembly has been identified as being faulty, refer to the maintenance allocation TM 11–5820–759–12 to determine the applicable maintenance category.

CAUTION

If operational symptoms are not known, or if they indicate the possibility of a short circuit within the rt unit, then make the short circuit test outlined in paragraph 2–5*a* before applying power to the unit.

(3) *Troubleshooting chart.*

Item	Indication	Probable trouble	Procedure
1	Front panel meter is not illuminated when FUNCTION switch is set at an operating position. Rt unit is completely inoperative.	Wrong or defective power cable.	Check that correct power cable is connected. Check continuity of cable leads and replace or repair as required (TM 11–5820–759–12).
		Primary power selector switch 1S1 set at wrong position or defective.	Check that primary power switch 1S1 is set at correct position for primary power source being used. Check continuity of wiring associated with primary power selector switch 1S1 (fig. 6–12①, ②).
		Open primary power fuse 1F1 and 1F2 for dc. Fuse 1F2 for ac.	Check fuse. Replace with proper value fuse if open, refer to TM 11–5820–759–12.
		Section D of FUNCTION switch 1S2 defective.	Refer to figure 6–12 ①, ②, check and repair or replace as required.
		Power transformer 1T1 defective.	Check continuity of windings, and the voltages, (fig. 6–12 ①, ②). Replace if defective.
2	Front panel meter is not illuminated when FUNCTION switch is set at an operating position when operating from a dc primary power source; ac operation normal.	Open primary power fuse 1F1.	Check fuse. Replace with proper value fuse if open (TM 11–5820–759–12).
		Defective power transformer 1T1 (between terminals 5 and 9).	Check continuity of windings and voltages, (fig. 6–12 ①, ②). Replace if defective.
		Defective electronic chopper 1A18A or 1A18B.	Check electronic chopper 1A18A or 1A18B and repair or replace (fig. 1–14, 1–15).
3	Front panel meter not illuminated, all operating modes are normal.	Defective front panel meter lamp or defective wiring.	Check continuity of meter lamp. If open, replace meter 1M1. Check continuity of meter lamp wiring and repair as required, (fig. 6–12①, ②).
4	Operational modes inoperative, front panel meter is illuminated.	Fuse 1A20F3 open	Check fuse. Replace with proper value fuse if open (TM 11–5820–759–12).
		Relay 1A20K1 defective	Check relay by substitution.
		FUNCTION switch 1S2 defective.	Refer to figure 6–12①, ②, check switch and continuity of associated wiring.
5	Front panel meter not illuminated in all operating modes, unable to transmit or receive, ambient noise is present at front panel speaker.	Defective power transformer 1T1.	Refer to figure 6–12①, ② and check continuity at power transformer 1T1 windings 10, 11, and 12. Replace transformer if defective.
		Defective primary power selector switch 1S1.	Refer to figure 6–12①, ② and check continuity of section B (rear) of switch 1S1 and associated wiring. Repair or replace as required.
6	Unable to transmit or receive in all modes, ambient noise is present at front panel speaker with RECEIVE AUDIO control fully clockwise.	Defective +225 Vdc power supply circuitry.	Measure power supply voltage (TM 11–5820–759–12). Replace faulty component.
		Defective rf amplifier 1A1	Check tubes 1A1A6V1 and 1A1A6V2 (para 2–5*d*) and perform receiver/transmit signal substitution checks.
		Rf amplifier 1A1, translator 1A6, filter assembly 1A19, rf oscillators 1A10 through 1A13 and 1A17, frequency mixer 1A3, frequency	Perform the receive/transmit signal substitution test outlined in paragraph 2–5*d*. Replace faulty assembly and refer to section VI for alignment procedures.

Item	Indication	Probable trouble	Procedure
		mixer 1A4, synthesizer 1A2, frequency mixer 1A8, or if. amplifier 1A7 is defective.	
7	Receive inoperative in all modes, transmit normal.	Relay 1K4, limiter 1A5, rf amplifier 1A1, translator 1A6, if. amplifier 1A7, or af amplifier 1A16.	Perform receive signal substitution test outlined in paragraph 2–5*d*. Replace faulty assembly and refer to section VI for alignment procedures.
8	Transmit inoperative in all modes, receive normal.	Rf amplifier 1A1, pa. circuitry, antenna relay 1K4, keyline relay 1A20K2, translator 1A6, if. amplifier 1A7, or frequency mixer 1A8 defective.	Perform transmit signal substitution test outlined in paragraph 2–5*d*. Replace faulty assembly and refer to section VI for alignment procedures.
9	Rt unit is completely inoperative on certain frequencies for all modes, other frequencies are normal.	Rf oscillator 1A10, 1A11, 1A12, or 1A13 defective.	Perform the receive/transmit signal substitution test outlined in paragraph 2–5*d* using one of the faulty frequencies. Replace the faulty assembly.
10	Unable to transmit or receive in lsb. Usb, am., and cw modes normal.	Lsb filter 1A19FL6 defective.	Perform the receive/transmit signal substitution test outlined in paragraph 2–5*d* and replace the faulty assembly. Refer to section VI for alignment procedures.
		FUNCTION switch 1S2 or associated circuitry defective.	Refer to figure 6–12①, ②, check continuity of wiring, and repair or replace as required.
11	Unable to transmit or receive in usb, am., and cw. Lsb mode normal.	Usb filter 1A19FL5 defective.	Perform the receive/transmit signal substitution test outlined in paragraph 2–5*d* and replace the faulty assembly. Refer to section VI for alignment.
		FUNCTION switch 1S2 or associated circuitry defective.	Refer to figure 6–12①, ②, check continuity of wiring, and repair or replace as required.
12	Cw transmit mode inoperative, no cw transmit tone present at front panel speaker. All other transmit/receive modes normal.	Frequency mixer 1A8 defective.	Replace frequency mixer 1A8 and refer to section VI for alignment procedures.
		Closure to ground absent at pin C of 1J23 in cw transmit mode.	Refer to figure 6–12①, ②, check main frame wiring, repair as required.
13	Cw keyline not holding for ½-second (approx.) after key release.	Frequency mixer 1A8 defective.	Replace frequency mixer 1A8 and refer to section VI for alignment procedures.
14	No am. carrier during transmit.	Transistor 1A4Q7 or associated circuitry defective on frequency mixer 1A4.	Replace frequency mixer 1A4.
		During am. transmit mode, +12 Vdc absent at pin C of 1J18.	Refer to figure 6–12①, ②, check for proper voltage. Repair defective main frame wiring as required.
		455 kHz carrier reinsert signal missing at 1P10 on translator 1A6.	Check for a 455 kHz, 500 ±100 mvac signal at 1P10. Repair defective wiring.

Item	Indication	Probable trouble	Procedure
		Limiter 1A15 defective	Replace limiter 1A15 and refer to section VI for alignment procedures.
15	Transmit am. carrier exceeds 30 watts, no modulation.	Limiter 1A15 defective or out of adjustment.	Refer to chapter 2, section VI for alignment procedures if out of adjustment. Replace limiter 1A15 if defective.
16	Transmit output distorted in am. mode. All other modes normal.	Limiter 1A15 defective	Replace defective limiter 1A15 and refer to section VI for alignment procedures.
		Frequency mixer 1A4 carrier reinsert amplifier 1A4Q7 or associated circuitry defective.	Check for proper carrier reinsert signal at 1A4J16 during am. transmit mode. Replace defective frequency mixer 1A4.
17	Transmit power output low in all modes, receive normal.	Pa. stage defective	Check 1V1, 1V2, and 1V3 by substitution (fig. 6–12①, ②).
		Pa. bias improperly adjusted	Refer to TM 11–5820–759–12 and make the proper adjustments.
		Low power supply voltage	Check for +900 Vdc across 1C2.
18	Transmitter output distorted in lsb, usb, and cw modes.	Limiter 1A14 defective	Replace limiter 1A14.
19	Front panel does not indicate during transmit (all modes). Receive indications normal.	Transistor 1Q3 or associated circuitry defective.	Refer to figure 6–12①, ②, and check circuitry. Replace faulty component.
20	Am. receive mode normal. All other transmit/receiver modes inoperative.	Frequency mixer 1A8 defective.	Replace frequency mixer 1A8 and refer to section VI for alignment procedures.
		455 kHz injection signal absent at 1A8J24 on frequency mixer 1A8.	Check for a 455 kHz, 250 ±50 mvac, signal in the lsb mode at 1A1P24. Repair or replace defective cable.
		455 kHz injection signal absent at 14AJ17 on frequency mixer 1A4.	Replace frequency mixer 1A4.
21	Unable to receive in am. mode. All other modes normal.	Frequency mixer 1A8 am. detector circuitry defective.	Replace frequency mixer 1A8 and refer to section VI for alignment procedures.
		+12 Vdc absent at pin V of 1A8P23.	Refer to figure. 6–12①, ② and check for proper voltage. Repair defective wiring as required.
22	Receiver overloaded, S-meter does not indicate.	If. amplifier 1A7 agc circuitry defective.	Replace if. amplifier 1A7.

Item	Indication	Probable trouble	Procedure
23	Vernier tuning (vfo) inoperative when selected.	Rf oscillator 1A9 defective	Check for a 62 ±10 mvac signal at 1P35 with vfo selected. Replace rf oscillator 1A9 and refer to section VI for alignment procedures.
		Frequency mixer 1A4 defective.	Check for a 455 kHz injection signal at 1A8J17 with vfo selected. Replace frequency mixer 1A4.
		Switch 1S5 defective	Check for +12 Vdc at pin C of 1P40 with vfo selected. Refer to figure 6–12①, ② and repair defective wiring or replace defective switch 1S5.
24	Vernier tuning operates at one frequency when selected. 1 kHz FREQUENCY KILOCYCLES control rotates freely.	Capacitor 1A9C13 not rotating. Speed decreaser gear assembly 1MP70 defective.	Check speed decreaser gear assembly 1MP70 for proper operation. Refer to section VI for alignment procedures, and figure 2–2①.
25	Operating frequency inaccurate by stable.	Frequency mixer 1A3, 1A4, or rf oscillator 1A17 defective.	Make receive/transmit signal substitution checks, paragraph 2–5*d*. Replace faulty assembly and refer to section VI for alignment procedures.
26	Operating frequency unstable and inaccurate.	Rf oscillator 1A17 defective	Make frequency accuracy test (para. 2–5*b*(6)). Replace faulty assembly and refer to section VI for alignment procedures.

d. Signal Substitution and Signal Tracing.

(1) *General.* Signal substitution and signal tracing procedures are designed to localize a trouble to the faulty assembly or section in the rt unit. For signal substitution checks, an externally generated signal is substituted for the signal normally present to verify the faulty assembly or section. Signal tracing procedures consist of checking for the proper output and input signals at the various assemblies in the rt unit. The following checks are divided into the three major rt unit failure symptoms: (*a*) both transmit and receive modes inoperative, (*b*) transmit mode only inoperative, and (*c*) receive mode only inoperative. The test equipment required for the following test is listed in paragraph 2–3*b*.

(2) *Both transmit and receive modes inoperative.*

(*a*) Remove the top and bottom covers from the rt unit, refer to paragraph 2–11*a* and *b*.

(*b*) Connect the test equipment as shown in figure 2–1 (transmit).

(*c*) Set FUNCTION switch at CW, FREQUENCY KILOCYCLES switches at 2,555 kHz, and TRANSMIT AUDIO control at mid-range.

(*d*) Tune PRESELECTOR control and PA TUNE control to the approximate frequency positions.

(*e*) At translator 1A6 (figures 2–4, and 6–17) disconnect 1P11 from 1A6J11 and connect rf output of AN/GRM-50 to 1P11. Set AN/GRM-50 controls to produce a 2.555 MHz cw output at 400 mvac.

(*f*) Key rt unit with the M-143/GR Microphone and tune PRESELECTOR and PA TUNE controls for a maximum indication on the ME–26(*)/U meter.

(*g*) If ME–26(*)/U (fig. 2–1) indicates approximately 50 Vac or more proceed to step (*l*), if ME–26(*)/U does not indicate an output proceed with step (*h*).

(*h*) Connect probe of the AN/URM-145 to pin 11 of relay 1A1K1 on rf amplifier 1A1, figure 2–2 and 6–13, and check for 400 mvac with rt unit keyed.

(*i*) If the AN/URM-145 does not indicate, then check coaxial cable between 1P11 and 1P50, and relay 1A1K1. If indication is present on AN/URM-145 proceed with step (*j*).

(*j*) Connect probe of ME–26(*)/U to terminal E159 (fig. 6–13) on rf amplifier 1A1A6. Key rt unit and slowly tune PRESELECTOR control for a maximum indication on the ME–26(*)/U.

(*k*) If ME–26(*)/U indicates 35 vac or more for step (*j*) check antenna transfer relay 1K4 (fig. 2–3) for proper operation. If indication is low or absent rf amplifier 1A1 is faulty. Check tubes 1A1A6V1 and 1A1A6V2 (fig. 6–13) for

proper operation with a tube tester before replacing rf amplifier 1A1.

(*l*) Disconnect AN/GRM-50 from 1P11 and reconnect 1P11 to 1A6J11.

(*m*) At translator 1A6 disconnect the coaxial connectors (table 2–1) and connect them, in sequence, to the AN/URM-145 probe using appropriate adapters. Refer to table 2–1 for proper values. Reconnect the connectors after making the voltage checks.

Table 2–1. Translator 1A6 Input Signals

Connector	Value	Remarks
1P7	150 to 250 mvac	Rf oscillator 1A11 output (fig. 1–8). Rotate 100 kHz FREQUENCY KILOCYCLES control from 0 to 9 and check for proper output.
1P8	250 to 650 mvac	Rf oscillator 1A10 output (fig. 1–7). Rotate 1,000 kHz FREQUENCY KILOCYCLES control from 2 to 14 and check for proper output.
1P9	125 to 200 mvac	11.555 MHz output from frequency mixer 1A3 (fig. 6–15). Rotate the 1,000 kHz, 100 kHz, 10 kHz, and 1 kHz FREQUENCY KILOCYCLES controls and check for proper output.
1P10	15 to 50 mvac	Key rt unit in cw mode to check signal.

(*n*) If either rf oscillator 1A10 or 1A11 output signal is low or absent on any switch position, repair or replace the appropriate assembly. If only frequency mixer 1A3 output signal is low or absent, then proceed with step (*o*) below. If the signal at 1P10 is low or absent, then proceed with step (*q*) below. If both the signal at 1P10 and frequency mixer 1A3 signal are low or absent, then proceed with step (*t*) below.

(*o*) A low or absent signal at 1P9 indicates an abnormal input to or a defective component in frequency mixer 1A3 (fig. 6–15). At frequency mixer 1A3 disconnect the following coaxial connector and then connect them, in sequence, using appropriate adapters to the AN/URM-145. Refer to table 2–2 for the coaxial connectors and proper values. Do not reconnect the connectors.

Table 2–2. Frequency Mixer 1A3 Input Signals

Connector	Value	Remarks
1P35	190 to 200 mvac	Rf oscillator 1A13 (fig. 1–10) output signal. Rotate 1 kHz FREQUENCY KILOCYCLES control from 0 to 9 and check for proper output.
1P42	5 to 12 mvac	Rf oscillator 1A12 (fig. 1–9) output signal. Rotate 10 kHz FREQUENCY KILOCYCLES control from 0 to 9 and check for proper output.
1P36	1 to 1.5 mvac	MHz spectrum signal from synthesizer 1A2 (fig. 6–14).
1P34	20 to 50 mvac	Rf oscillator 1A10 (fig. 1–7) output signal. Rotate 1,000 kHz FREQUENCY KILOCYCLES control from 2 to 14 and check for proper output.
1P33	30 to 45 mvac	Rf oscillator 1A11 (fig. 1–8) output signal. Rotate 100 kHz FREQUENCY KILOCYCLES control from 0 to 9 and check for proper output.

(*p*) Using the AN/URM-145 measure the 100 kHz spectrum output signal from synthesizer 1A2 (fig. 6–14) at 1A3E165 (fig. 6–15). Indicated signal should be between 50 and 80 mvac. Reconnect 1AP33, 1AP34, 1AP35, 1AP36, and 1AP42 to their respective connectors on frequency mixer 1A3.

NOTE

If any of the oscillator injection signals are low or absent on any or all switch positions, then check the appropriate rf oscillator assembly. If either of the spectrum injection signals are low or absent, then check synthesizer 1A2.

(*q*) A low or absent signal at 1P10 in the cw transmit mode indicates a defective usb filter (1A19FL5) or filter selection circuit, or an abnormal input to or a defective component in if. ampli-

fier 1A7 (fig. 6–18). Connect the AN/URM-145 to terminal 1A7E167 on if. amplifier 1A7 and key the rt unit. If the AN/URM-145 indicates a proper signal of at least 110 mvac, then the fault is in the usb filter or filter selection circuitry, refer to figure 6–12①, ② and check wiring. If the signal at 1A7E167 is low or absent then unsolder the lead from 1A7E167 and check for shorts. If no shorts are found, then disconnect 1P22 from 1A7J22 and connect 1P22 to the AN/URM-145 and key the rt unit. A proper indication of 20 mvac indicates a faulty if. amplifier 1A7. A low or absent signal at 1P22 indicates a faulty frequency mixer 1A8 (fig. 6–19) assembly or a faulty frequency mixer 1A4 (fig. 6–16) assembly. To determine which, proceed with step (*r*) below.

(*r*) At frequency mixer 1A4 disconnect 1P17 and connect the AN/URM-145 to 1A4J17. A proper indication should be between 200 and 300 mvac. If this signal is normal, then frequency mixer 1A8 or the coaxial cable between 1A4J17 and 1A8J24 is defective. If the signal at 1A4J17 is low or absent, then proceed with step (*s*) below.

(*s*) A low or absent 455 kHz injection signal output at 1A4J17 (except for am. receive mode) indicates an abnormal input to or a faulty component in frequency mixer 1A4 (fig. 6–16). Disconnect the coaxial connectors listed in table 2–3 and connect them in sequence to the AN/URM-145 to check for the proper input signals.

Table 2–3. Frequency Mixer 1A4 Input Signals

Connector	Value	Remarks
1P12	approximately 50 mvac	Rf oscillator 1A13 (fig. 1–10) output signal. Rotate 1 kHz FREQUENCY KILOCYCLES control from 0 to 9 and check for proper output.
1P13	approximately 150 mvac	Rf oscillator 1A12 (fig. 1–9) output signal. Rotate 10 kHz FREQUENCY KILO CYCLES control from 0 to 9 and check for proper output.
1P14	30 to 50 mvac	10 kHz spectrum injection signal from synthesizer 1A2 (fig. 6–14).
1P15	5.5 to 7.5 mvac	1 kHz spectrum injection signal from synthesizer 1A2.

NOTE

If either rf oscillator 1A12 or 1A13 injection signal is low or absent on any or all switch positions, then check the appropriate rf oscillator assembly. If either of the spectrum injection signals are low or absent, then check synthesizer 1A2 assembly. If all inputs to frequency mixer 1A4 (fig. 6–16) are normal, then the fault is in frequency mixer 1A4.

(*t*) Low or lack of injection signals at both 1P9 and 1P10 with normal rf oscillator 1A10 and 1A11 injection voltage indicates either a faulty rf oscillator, 1A12, 1A13, or 1A9, a faulty synthesizer 1A2 assembly, or a faulty rf oscillator 1A17 assembly.

(3) *Transmit mode only failure.*

(*a*) Perform steps (2)(*a*) through (*g*) above of the transmit and receive failure checks.

(*b*) If the ME–30(*)/U indicates approximately 50 mvac for step (2)(*g*) above then proceed with step (*d*) below. If the ME–30(*)/U did not indicate a proper signal for step (2)(*g*) then proceed with steps (2)(*h*) through (*j*) above of the transmit and receive checks and step (*c*) below.

(*c*) If ME–26(*)/U indicates 35 vac or more for step (2)(*j*) trouble is in pa. stages. Substitute tubes 1V1, 1V2, and 1V3. If trouble still exists, higher level maintenance is required. If ME–26(*)/U does not indicate 35 Vac for step (2)(*j*) above then check tubes 1A1A6V1 and 1A1A6V2 on rf amplifier 1A1. If tubes check good then replace rf amplifier 1A1.

(*d*) At translator 1A6 (fig. 6–17) disconnect 1P10 from 1A6J10 and connect 1P10 to AN/URM-145. With rt unit keyed, AN/URM-145 indication should be between 15 and 30 mvac. If proper indication is not obtained, reconnect 1P10 to 1A6J10 and proceed with step (*e*) below. If proper indication is obtained then trouble is in translator 1A6. Refer to the proper paragraphs of this chapter and remove and replace faulty translator 1A6 assembly.

(*e*) A low or absent signal at 1P10 in the

cw transmit mode (receive mode of the rt unit is normal) indicates a faulty if. amplifier 1A7 (fig. 6–18) assembly or frequency mixer 1A8 (fig. 6–19) assembly. At if. amplifier 1A7 disconnect 1P22 from 1A7J22 and connect 1P22 to the AN/URM-145. With rt unit keyed in the cw mode, the AN/URM-145 indication should be 20 mvac. If proper indication is obtained then trouble is in if. amplifier 1A7 transmit if. stage. Refer to the appropriate paragraphs of this section for removal, installation, and alignment procedures of if. amplifier 1A7. If proper indication is not obtained then trouble is in frequency mixer 1A8. Refer to the proper paragraphs of this chapter for frequency mixer 1A8 removal, installation, and alignment procedures.

(4) *Receive mode only failure.*

(*a*) Remove the top and bottom covers from the rt unit, refer to paragraph 2–11*a* and *b*.

(*b*) Connect the test equipment as shown in figure 2–1 (transmit).

(*c*) Set FUNCTION switch at CW, FREQUENCY KILOCYCLES switches at 2,555 kHz, and TRANSMIT AUDIO control at TUNE. Tune rt unit for peak output, and adjust TRANSMIT AUDIO control for an output level of 100 watts.

CAUTION

For the following steps do not key the rt unit.

(*d*) Disconnect the M-143/GR Microphone and the Dummy Load DA-75/U. Connect the AN/GRM-50 Rf Signal Generator to ANTENNA connector J4. Set AN/GRM-50 controls to produce a 2.555 MHz cw output at 10 mvac. Set rt unit RF GAIN control fully clockwise.

(*e*) At amplifier-limiter 1A5 (fig. 2–2①, 1–5) connect AN/URM–145 probe to terminal 1A5E103. AN/URM-145 should indicate 10 mvac. If proper indication is obtained proceed to step (*f*) below. If proper indication is not obtained, check coaxial cables between ANTENNA connector 1J4 (fig. 2–3) and amplifier-limiter 1A5. Check relay 1K4 for proper operation.

(*f*) At amplifier-limiter 1A5, connect AN/URM-145 probe to terminal 1A5E102. AN/URM-145 should indicate 10 mvac. If proper indication is obtained, proceed to step (*g*) below. If proper indication is not obtained, refer to paragraphs 2–11*g* and 2–14*e* and replace amplifier-limiter 1A5.

(*g*) At rf amplifier 1A1 (fig. 2–2①, 6–13), connect AN/URM-145 probe to terminal 12 of relay 1A1K1. AN/URM-145 should indicate 10 mvac. If proper indication is observed, proceed to step (*h*) below. If proper indication is not obtained, check coaxial cable between amplifier-limiter 1A5 and rf amplifier 1A1. Check relay 1A1K1 for proper operation.

(*h*) At rf amplifier 1A1, connect AN/URM-145 probe to terminal 5 of relay 1A1K1.

(*i*) At AN/GRM-50, vary frequency above and below 2.555 MHz. A peak indication of at least 50 mv should be obtained. If proper indication is obtained, proceed to step (*j*) below. If proper indication is not obtained, refer to paragraphs 2–11*c* and 2–14*a* and replace rf amplifier 1A1.

(*j*) At if. amplifier 1A7 (fig. 2–3, 6–18), connect AN/URM-145 probe to terminal 1A7E167.

(*k*) At rf amplifier 1A1 (fig. 6–13), connect jumper wire between pins E and C of connector 1P31.

(*l*) At AN/GRM-50, set output level at 1 mvac. Slowly vary frequency above and below 2.555 MHz. A peak indication of 50 ± 10 mvac should be obtained on AN/URM-145. If proper indication is obtained, disconnect jumper wire from pins E and C of connector 1P31, AN/GRM-50, and AN/URM-145 and proceed to step (*m*) below. If proper indication is not obtained, fault can be either the transmit/receive switching voltage or translator 1A6. Refer to figure 6–12①, ② and check terminals 1A6E62 for +12 vdc (receive) and 1A6E63 for 0 vdc (receive). If both terminals check then refer to paragraphs 2–11*h* and 2–14*f* and replace translator 1A6.

(*m*) Set AN/GRM-50 controls for a 455 kHz cw signal of 50 mvac and connect it to 1A7E167 on if. amplifier 1A7. Disconnect 1P22 from 1A7J22 and connect 1A7J22 to AN/URM-145. Vary output frequency on AN/GRM-50 above and below 455 kHz while observing the meter indication for a peak indication of 1000± 20 mvac. If the AN/URM–145 indication is not proper then replace if. amplifier 1A7, refer to paragraphs 2–10*i* and 2–14*g*. If a normal indication was obtained then fault is in receive circuitry following if. amplifier 1A7. If signal levels are excessive (audio distortion) and front panel "S" meter does not indicate if. amplifier 1A7 agc circuitry may be defective requiring if. amplifier 1A7 to be replaced. If excessive voltage does not decrease as

signal generator is detuned off frequency then if. amplifier 1A7 stages may be oscillating. If a normal indication was obtained then fault is in receiver circuitry following if. amplifier 1A7. Reconnect 1P22 to 1A7J22 and proceed with step (*n*) below.

(*n*) Connect ME-26(*)/U ac probe across terminals 4 and 6 of REMOTE connector 1J3. ME-26(*)/U should indicate 1 vac with AN/GRM-50 tuned for a peak indication at 455 kHz. If audio signal is present at 1J3 for all modes but is absent at speaker with SPEAKER switch set at ON and RECEIVE AUDIO control fully clockwise then the fault is probably in af amplifier 1A16, RECEIVE AUDIO control 1R20, speaker 1LS1, or main frame wiring, refer to figure 6-12①, ② and check circuitry or replace af amplifier 1A16.

Section III. ANTENNA COUPLER TROUBLESHOOTING

2-6. General

This section contains antenna coupler troubleshooting procedures necessary to isolate a fault to a particular component or assembly.

2-7. Procedures

The following troubleshooting chart contains the steps necessary to isolate a fault in the antenna coupler unit. Refer to paragraph 2-3*b* for test equipment.

a. Troubleshooting Chart.

Item	Indication	Probable trouble	Procedure
1	No meter indication for either forward or reflected power, antenna coupler provides proper impedance matching.	SWR assembly 2A1 defective	Replace SWR assembly 2A1, paragraphs 2-12*b* and 2-16*a* (fig. 6-20).
		Meter 2M1 defective	Refer to paragraph 2-7*b* and check meter, replace if necessary.
		Switch 2S2 or associated wiring defective.	Check switch and wiring for continuity, repair or replace as required.
2	Cannot tune antenna coupler for minimum reflected power.	Circuitry defective	Refer to higher level of maintenance.
3	LOAD counter does not indicate properly when rotating LOAD control.	Counter or mechanical linkage defective.	Refer to higher level of maintenance.
4	TUNE counter does not indicate properly when rotating FINE TUNE control.	Counter or mechanical linkage defective.	Refer to higher level of maintenance.

b. SWR and Meter Isolation Checks. If antenna coupler does not indicate either forward or reflected power but tunes properly, then proceed with the following checks:

(1) Remove antenna coupler cover (fig. 2-7), refer to paragraph 2-12*a*. Connect a 10,000 ohm, ½ watt composition resistor between the center terminal of Meter switch 2S2 and the positive +12 vdc terminal of power supply PP-3940/G. Ground negative dc terminal of PP-3940/G to antenna coupler chassis.

(2) Antenna coupler meter should indicate full scale for both positions of switch 2S2. If not, replace meter 2M1. If meter indicates full scale for both positions, refer to paragraphs 2-12*b* and 2-14*a* and replace SWR assembly 2A1. If meter indicates full scale for only one position, replace switch 2S2.

Section IV. REMOTE CONTROL TROUBLESHOOTING

2-8. General

This section contains remote control troubleshooting procedures necessary to isolate a fault to a particular component or assembly.

2-9. Procedures

The following troubleshooting chart contains the steps necessary to isolate a fault in the remote control unit. Refer to paragraph 2-3*b* for test equipment.

NOTE

Prior to troubleshooting the remote control, check that fuse F3 in the rt unit has not blown (fig. 6–12①).

Item	Indication	Probable trouble	Procedure
1	No receiver audio output at either speaker or handset.	Audio amplifier assembly A1 defective.	Refer to paragraphs 2–13*b* and 2–17*a* and replace assembly (fig. 6–21).
		Transformer assembly A2 defective.	Refer to paragraphs 2–13*c* and 2–17*b* and replace assembly (fig. 2–8).
		VOLUME control R5 or associated wiring defective.	Make continuity checks and replace or repair faulty component or wiring (fig. 2–8).
		VOLUME switch S2–A or associated wiring defective.	Make continuity checks and replace or repair defective component or wiring (fig. 2–8).
2	Unable to key rt unit.	Switch S2–B or associated wiring defective.	Make continuity checks and replace or repair defective component or wiring.
3	Unable to modulate rt unit. Key functions normally.	Transformer assembly A2 or associated wiring defective.	Refer to paragraphs 2–13*c* and 2–17*b* and replace assembly. Make continuity checks of associated wiring and repair as required (fig. 2–8).

Section V. GENERAL SUPPORT MAINTENANCE

2–10. General Support Maintenance Techniques

The general support maintenance consists of repair by removal and replacement of assemblies and some parts of the rt unit, antenna coupler, and remote control, and special alignment procedures. Follow the procedures in paragraphs 2–11 through 2–16 to remove and replace assemblies in the rt unit, antenna coupler, and remote control. Observe the following precautions:

a. Before an assembly is removed, note the position of the leads. Tag each lead before removing.

b. Be careful not to damage other leads or parts by pushing or pulling them out of the way.

c. Do not disturb front panel control settings unless specified.

d. The test equipment authorized for general support personnel for maintenance are the same as those contained in paragraph 2–3*b*.

2–11. Rt Unit Removal Procedures

NOTE

Refer to figures 2–2 and 2–3 for location of assemblies.

a. Rt Unit Top Cover. To remove the rt unit top cover, remove the twelve screws (six at either side) and slide cover off rt unit.

b. Rt Unit Bottom Cover. To remove the rt unit bottom cover, remove the 22 screws and hardware that secure the bottom cover. Remove bottom cover from rt unit.

c. Rf Amplifier 1A1 (fig. 6–10). To remove rf amplifier 1A1, proceed as follows.

(1) Refer to *a* and *b* above and remove rt unit top and bottom covers.

(2) At bottom of rt unit, remove six screws (1) and lockwashers (2) securing cover (3) to bottom of rf amplifier 1A1.

(3) At bottom of rt unit, remove six screws (4) and lockwashers (5) securing cover (6) to pa. section.

(4) At front panel, set 1000 kHz FREQUENCY KILOCYCLES control at position 14.

(5) At bottom of rt unit, loosen the two setscrews (7) in shaft collar (8). Slide pa. switch 1S6 shaft towards rear of chassis and remove flexible shaft coupling (9).

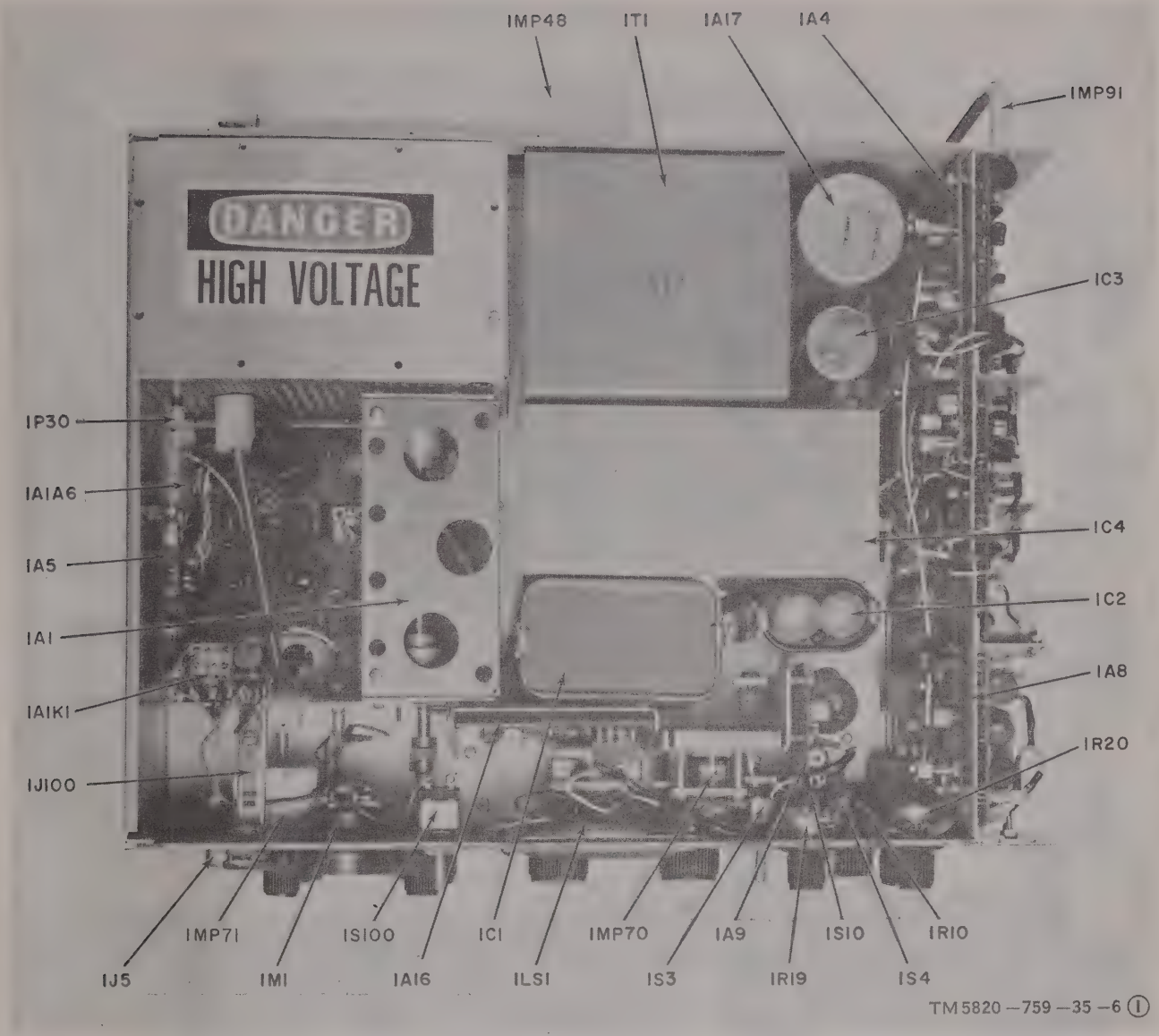


Figure 2-2①. Receiver-Transmitter, Radio Rt-902/GRC-165 top view.

(6) At bottom of rf amplifier 1A1, slide switch 1A1S1 shaft (25) towards rear of chassis and remove flexible shaft coupling (10).

(7) At pa. standoff 1E69, unsolder the white/yellow wire. Pull wire through rubber grommet into rf amplifier 1A1.

(8) At ground lug (26) unsolder the ground wire.

(9) At feedthrough terminal (27), unsolder white/black wire.

(10) At pa. high voltage shield, loosen the two setscrews (11) in rigid shaft coupling (12).

(11) At back of front panel, loosen the two setscrews (13) in rigid shaft coupling (14).

(12) Push rigid shaft coupling (12) towards rear of chassis and disengage shaft (15) from rigid shaft coupling (12). Remove shaft (15) and the two rigid shaft couplings (12, 14).

(13) At top of rf amplifier 1A1, disconnect connectors (24, 28, and 29).

(14) At rf amplifier relay 1A1K1, unsolder white/black/yellow wire from terminal 14 and unsolder the orange wire from terminal 8.

(15) At ground lug, located on relay 1A1K1 mounting screw, unsolder coaxial cable shield lead (black wire).

(16) At standoff terminal adjacent to relay 1A1K1, unsolder blue wire.

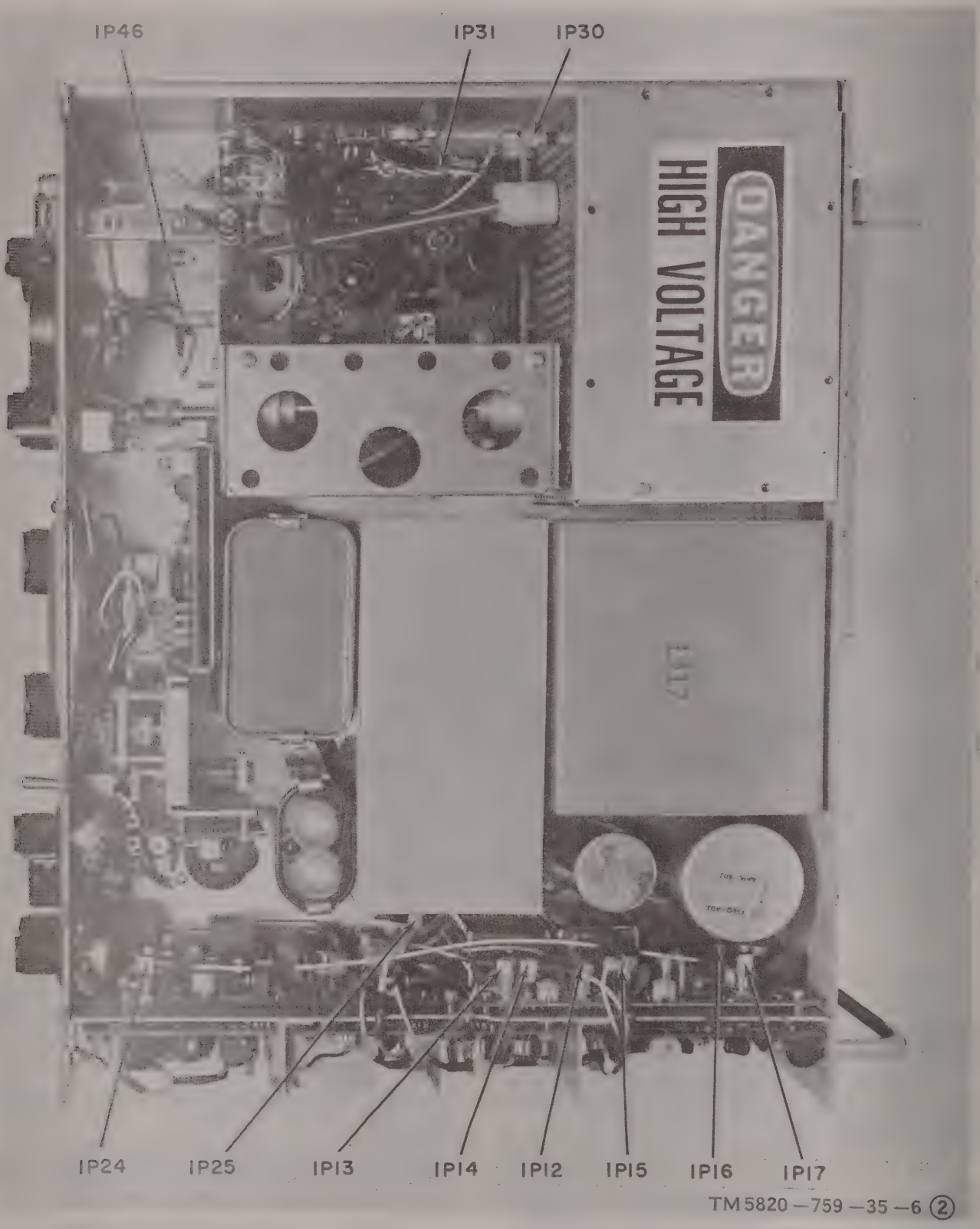


Figure 2–2(2). Receiver-Transmitter, Radio RT–902/GRC–165 top view.

(17) At limiter 1A5 (16) remove the four screws (17) securing limiter 1A5 to the chassis and move limiter 1A5 out of the way of rf amplifier 1A1.

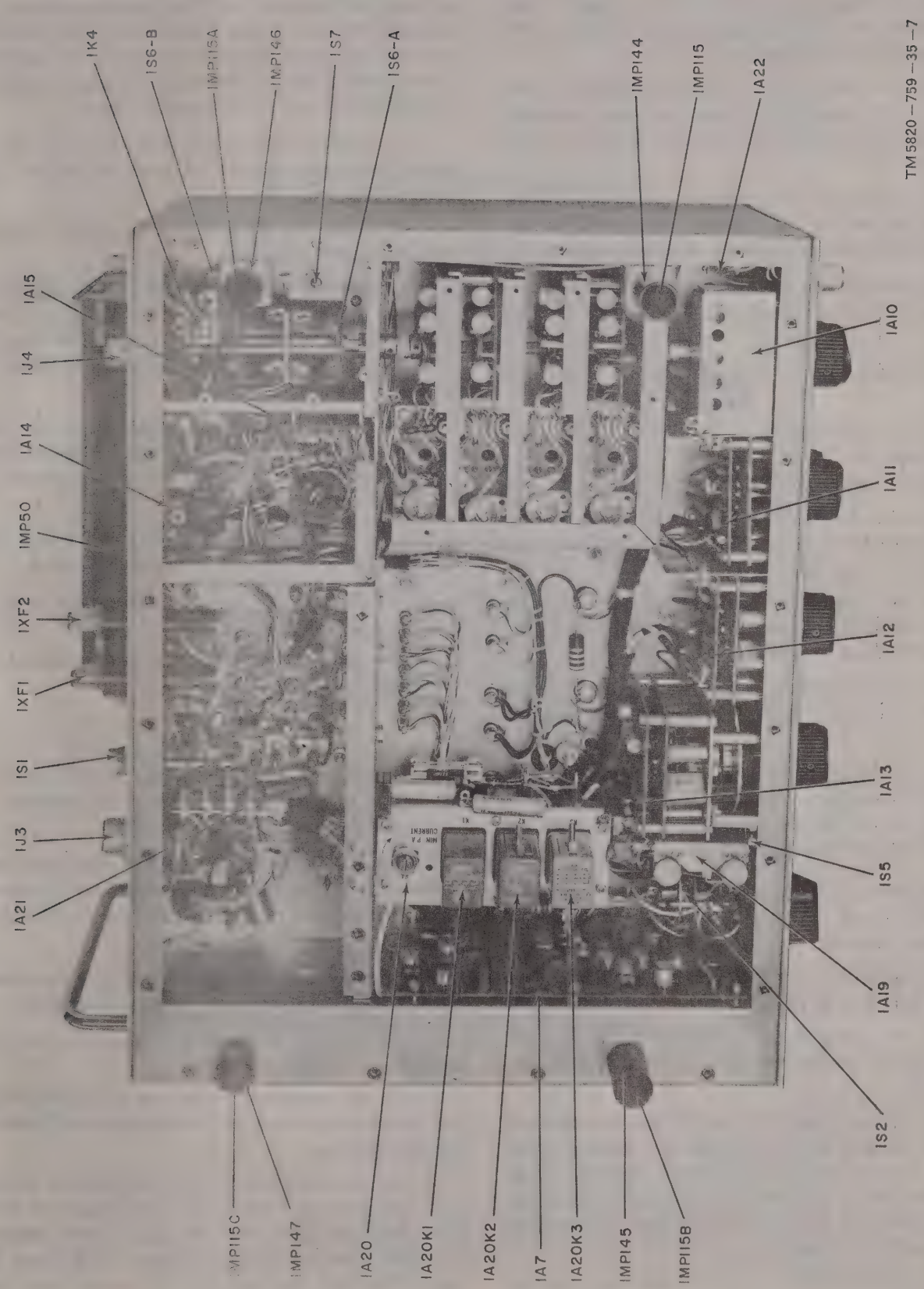


Figure 2-3. Receiver-Transmitter, Radio RT-902/GRC-165 bottom view.

(18) At front panel, remove nut (18), pull HEADPHONE jack (19) out of front panel, and move out of the way of rf amplifier 1A1.

(19) At top of rf amplifier 1A1, remove the six screws (20) and lockwashers (21) securing rf amplifier 1A1 to the chassis.

(20) At front panel, rotate PRESELECTOR control fully counterclockwise and then slightly clockwise to position rigid shaft coupling (22) vertically.

(21) Remove rf amplifier 1A1 by lifting straight up out of the chassis while guiding the 1P31 cable assembly in notch on rf amplifier 1A1.

d. Synthesizer 1A2 (fig. 2–4). To remove synthesizer 1A2 from rt unit chassis, proceed as follows:

(1) Refer to *a* above and remove rt unit top cover.

(2) At synthesizer 1A2, disconnect coaxial cable connector 1P43. Tag and unsolder wires connected to terminals 1A2E81 and 1A2E83.

(3) At forward divider, unsolder black ground wire from ground lug. Disconnect coaxial cable connector 1P46.

(4) At frequency mixer 1A3, disconnect coaxial cable connector 1P36 and slide coaxial cable and rubber grommet out of divider.

(5) At frequency mixer 1A4 (fig. 2–2②), disconnect coaxial cable connectors 1P14 and 1P15.

(6) At synthesizer 1A2, remove the four screws, lockwashers, and flatwashers securing the assembly to the chassis. Remove the assembly by sliding it up and out of the rt unit chassis.

e. Frequency Mixer 1A3 (fig. 2–4). To remove frequency mixer 1A3 from the rt unit chassis, proceed as follows:

(1) Refer to *a* and *b* above and remove rt unit top and bottom covers.

(2) At frequency mixer 1A3, disconnect coaxial cable connectors 1P33, 1P34, 1P35, 1P36, and 1P42.

(3) At the front and rear dividers, unsolder the black ground wires from the two ground lugs. At the rear divider, disconnect coaxial cable connector 1P46. Remove the hex nut and lockwasher securing 1J46 to the divider and remove 1J46 from the divider.

(4) At translator 1A6, disconnect coaxial cable connector 1P9 and slide rubber grommet out of divider.

(5) At frequency mixer 1A3, remove the four screws, lockwashers, and flatwashers securing the assembly to the rt unit chassis. Remove the screw and nut securing frequency mixer 1A3 shield to the bottom of rt unit chassis and remove assembly by sliding up and out of rt unit chassis.

f. Frequency Mixer 1A4 (fig. 2–2 ①). To remove frequency mixer 1A4 from the rt unit, proceed as follows:

(1) Refer to *a* above and remove rt unit top cover.

(2) At frequency mixer 1A4, disconnect coaxial cable connectors (fig. 2–2 ②) 1P12, 1P13, 1P14, 1P15, and 1P17. Remove the two screws, lockwashers, and flatwashers securing the assembly to the chassis.

(3) Slide frequency mixer 1A4 up until coaxial cable connector 1P16 is accessible. Disconnect coaxial cable connector 1P16 and remove assembly from rt unit.

g. Limiter 1A5 (fig. 2–2 ①). To remove limiter 1A5 from the rt unit, proceed as follows:

(1) Refer to *a* above and remove rt unit top cover.

(2) At limiter 1A5, tag and unsolder the three wires.

NOTE

During step (3) below, use a 3/16-inch open end wrench to prevent the chassis mounted spacers from turning.

(3) At limiter 1A5, remove the four nuts, lockwashers, and flatwashers securing the assembly to the chassis mounted spacers and remove the assembly.

h. Translator 1A6 (fig. 2–4). To remove translator 1A6 from the rt unit, proceed as follows:

(1) Refer to *a* above and remove rt unit top cover.

(2) At translator 1A6 top shield cover, remove the two screws and lockwashers and remove the shield cover.

(3) At translator 1A6, disconnect coaxial cable connectors 1P7, 1P8, 1P9, 1P10, and 1P11. Tag and unsolder the red wire from terminal 1A6E62, the white/black/green wire from terminal 1A6E63, the white/black/brown wire from

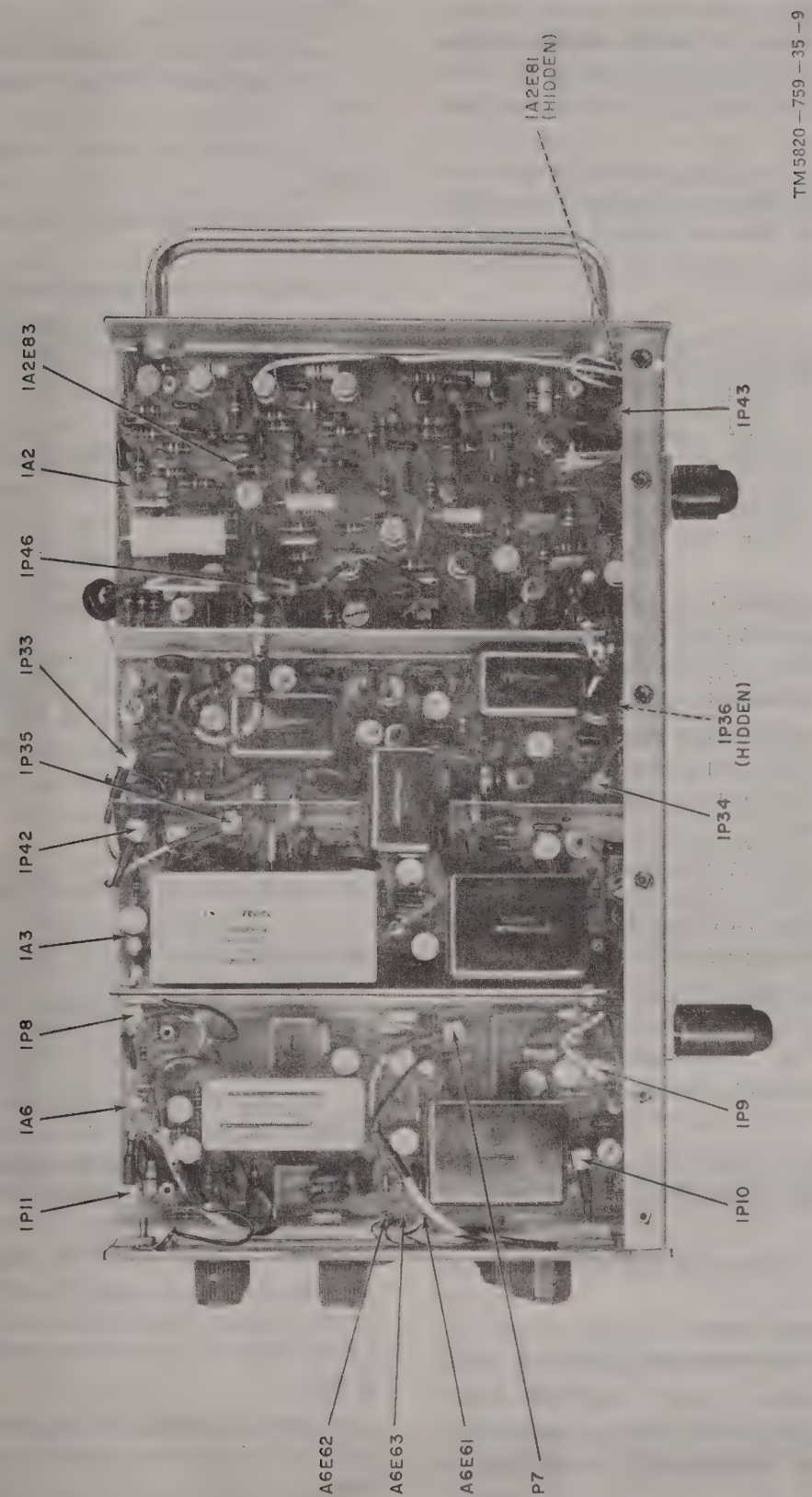


Figure 2–4. Receiver-Transmitter, Radio RT–902/GRC–165 right side view.

terminal 1A6E61, the two black wires (fig. 3–22) from terminal 1A6E190, and the black wire from terminal 1A6E189.

(4) At the bottom of the divider located between translator 1A6 and frequency mixer 1A3, unsolder the black ground wire from the ground terminal.

(5) At translator 1A6, remove two screws, lockwashers, and flatwashers. Using either a 3/16 inch nut driver or open-end wrench, remove the two shield mounting posts. Slide translator 1A6 up and out of rt unit.

i. If. Amplifier 1A7 (fig. 2–3). To remove if. amplifier 1A7 from the rt unit chassis, proceed as follows:

(1) Refer to *a* and *b* above and remove rt unit top and bottom covers.

(2) Refer to paragraph 2–11*f* and *j* and remove frequency mixer 1A8 to gain access to mounting screws.

(3) At if. amplifier 1A7, unsolder capacitor 1C57 from terminal 1A7E167 (fig. 3–24). Remove the three screws securing the lower edge of if. amplifier 1A7 to the rt unit chassis.

(4) At the top of rt unit chassis, adjacent to frequency mixer 1A8 connector 1P23, remove screw and lockwasher securing top of if. amplifier 1A7 to rt unit chassis.

(5) At the top of rt unit chassis adjacent to frequency mixer 1A4 connector 1P18, remove screw and lockwasher securing the top of if. amplifier 1A7 to rt unit chassis.

(6) At if. amplifier 1A7, pull out until coaxial cable connector 1P22 and multi-pin connector 1P20 are accessible. Disconnect coaxial cable connector 1P22 and multi-pin connector 1P20 and remove if. amplifier 1A7 from rt unit.

j. Frequency Mixer 1A8 (fig. 2–2 ①). To remove frequency mixer 1A8 from rt unit, proceed as follows:

(1) Refer to *a* above and remove rt unit top cover.

(2) At frequency mixer 1A3 (fig. 2–4), disconnect coaxial cable connectors 1P35 and 1P42.

(3) At frequency mixer 1A8, disconnect coaxial cable connector 1P24. Remove two screws, lockwashers, and flatwashers securing assembly to rt unit chassis.

(4) Slide frequency mixer 1A8 (fig. 2–2 ②) part way out of the chassis until coaxial cable connector 1P25 is accessible. Disconnect coaxial cable connector 1P25 and remove frequency mixer 1A8 from rt unit.

k. Rf Oscillator 1A9 (fig. 2–2 ①). To remove rf oscillator 1A9 from the rt unit, proceed as follows:

(1) Refer to *a* above and remove rt unit top cover.

(2) At rf oscillator 1A9, unsolder the black wire.

(3) At rf oscillator 1A9, remove the two screws and lockwashers securing the assembly to the bracket. Slide rf oscillator 1A9 up and out of the rt unit.

l. Rf Oscillator 1A10 (fig. 2–3). To remove rf oscillator 1A10 from the rt unit, proceed as follows:

(1) Refer to *a* and *b* above and remove rt unit top and bottom covers.

NOTE

During step (2) below, rf amplifier 1A1 and limiter 1A5 do not have to be completely removed from the rt unit, but should be moved up from the chassis to provide clearance for the removal of rf oscillator 1A10.

(2) Refer to *c* above to remove rf amplifier 1A1 and *g* above to remove limiter 1A5.

(3) At rf oscillator 1A10, remove two screws and one lockwasher and remove shield.

(4) At divider, located between rf oscillator 1A10 and rf oscillator 1A11, remove screw and nut securing ground lug to divider.

(5) At 1000 kHz FREQUENCY KILOCYCLES control, loosen the two setscrews and remove control knob. Remove shaft nut and lockwasher and push rf oscillator 1A10 rearward clear of the front panel. Use caution to prevent damage to wiring or printed circuit boards.

(6) At rf oscillator 1A10, tag and unsolder wires from terminals 1A10A1E8 through 1A10A1E13 and remove rf oscillator 1A10 from rt unit.

m. Rf Oscillator 1A11 (fig. 2–3). To remove rf oscillator 1A11 from the rt unit, proceed as follows:

(1) Refer to *a* and *b* above and remove rt unit top and bottom covers.

NOTE

During step (2) below, rf amplifier 1A1 and limiter 1A5 do not have to be completely removed from the rt unit, but should be moved up from the chassis to provide clearance for the removal of rf oscillator 1A11.

(2) Refer to *c* above to remove rf amplifier 1A1 and *g* above to remove limiter 1A5.

(3) At rf oscillator 1A10, remove the two screws and one lockwasher and remove shield.

(4) At dividers separating rf oscillator 1A11 from rf oscillator 1A10 and rf oscillator 1A12, remove hardware securing ground lugs to dividers.

(5) At the 100 kHz FREQUENCY KILOCYCLES control, loosen the two setscrews and remove control knob. Remove shaft nut and lockwasher and push rf oscillator 1A11 rearward clear of the front panel. Use caution to prevent damage to wiring or printed circuit board.

(6) At rf oscillator 1A11, tag and unsolder wires from terminals (fig. 3–33) 1A11A1E18 through 1A11A1E23 and remove rf oscillator 1A11 from rf unit.

n. Rf Oscillator 1A12 (fig. 2–3). To remove rf oscillator 1A12 from the rt unit, proceed as follows:

(1) Refer to *a* and *b* above and remove top and bottom covers from the rt unit.

(2) At the partition separating rf oscillator 1A10 from rf oscillator 1A11, remove screw and hardware securing round lug to partition.

(3) At the 10 kHz FREQUENCY KILOCYCLES control, loosen the two Allen setscrews and remove the control knob. Remove the shaft nut and lockwasher from the control shaft. Push rf oscillator 1A12 rearward until shaft clears front panel mounting hole. Rotate assembly for access to wiring.

(4) At rf oscillator 1A12, tag and unsolder wires attached to (fig. 3–36) terminals 1A12A1E30 through 1A12A1E35. Remove rf oscillator 1A12 from rt unit.

o. Rf Oscillator 1A13 (fig. 2–3). To remove rf oscillator 1A13 from the rt unit, proceed as follows:

(1) Refer to *b* above and remove rt unit bottom cover.

(2) Set rt unit on left-hand side.

(3) Tag and unsolder wires from (fig. 3–39) terminals 1A13A1E42 through 1A13A1E47. Unsolder the two black wires from the ground lug on relay bracket 1A20.

(4) Remove countersunk Phillips-head screw and hardware securing rf oscillator 1A13 to the VFO micro-switch mounting bracket.

(5) Remove countersunk Phillips-head screw securing rf oscillator 1A13 to round spacer secured to front panel.

(6) Loosen the two slotted-head screws at top of rf oscillator 1A13.

(7) Pull out 1 kHz FREQUENCY KILOCYCLES control knob. Pull rf oscillator 1A13 toward rear of rt unit and lift out of chassis.

p. Limiter 1A14 (fig. 2–3). To remove limiter 1A14 from the rt unit, proceed as follows:

(1) Refer to *b* above and remove rt unit bottom cover.

(2) Set rt unit on left-hand side.

(3) Remove two Phillips-head screws and hardware securing limiter 1A14 to the spacers mounted on rt unit rear panel.

(4) Pull limiter 1A14 out of chassis-mounted pin connector.

q. Limiter 1A15 (fig. 2–3). To remove limiter 1A15 from the rt unit, proceed as follows:

(1) Refer to *a* and *b* above and remove top and bottom covers from rt unit.

(2) Set rt unit on left-hand side.

(3) Remove two Phillips-head screws and hardware securing limiter 1A15 to spacers mounted on partition.

(4) Pull limiter 1A15 out of chassis-mounted pin connector.

r. Af Amplifier 1A16 (fig. 2–2 ①). To remove af amplifier 1A16 from the rt unit, proceed as follows:

(1) Refer to *a* above and remove rt unit top cover.

(2) Disconnect pin connector 1P26 (fig. 3–46) from 1A16J26 and pull af amplifier 1A16 out of holder.

s. Rf Oscillator 1A17 (fig. 2–2 ①). To remove rf oscillator 1A17 from the rt unit, proceed as follows:

(1) Refer to *a* and *b* above and remove rt unit top and bottom covers.

NOTE

During step (2) below, chopper 1A18 does not have to be completely removed from the rt unit, but should be moved to gain access to the bottom of rf oscillator 1A17.

(2) If rt unit has chopper 1A18 installed, refer to paragraph 2–11*t* and remove chopper 1A18.

(3) At bottom of rt unit, tag and unsolder all wires connected to rf oscillator 1A17.

(4) Remove the three nuts and lockwashers securing rf oscillator 1A17 to rt unit chassis and remove rf oscillator 1A17 from rt unit.

t. Chopper 1A18A or 1A18B (fig. 2–5). To remove chopper 1A18B or 1A18A, either 26.0 Vdc module (CV–2486/URC) or the 13.5 Vdc module (CV–2487/URC), from the rt unit, proceed as follows:

(1) Refer to *a* and *b* above and remove rt unit top and bottom covers.

(2) Set rt unit on left-hand side.

(3) For 26.0 Vdc chopper (1A18B) unsolder the two white wires from transformer 1T1 terminals 5 and 9.

(4) For 13.5 Vdc chopper (1A18A) unsolder the two black wires from transformer 1T1 terminals 6 and 8.

(5) Unsolder the red wire from fuse holder 1XF1 and the blue wire from transformer 1T1 terminal 7.

(6) At the bottom of the rt unit remove the two Phillips-head screws and hardware securing chopper 1A18A or 1A18B to the partition.

(7) At the top of the rt unit remove the two Phillips-head screws and hardware (located next to rf oscillator 1A17) securing chopper 1A18A or 1A18B to the rt unit.

(8) Carefully pull the chopper out from the rt unit until terminal 3 of switch 1S1 is accessible. Unsolder the yellow wire from terminal 3 of 1S1–A. Remove chopper 1A18A or 1A18B from the rt unit.

u. Filter Assembly 1A19 (fig. 2–3). To remove filter assembly 1A19 from rt unit, proceed as follows:

(1) Refer to *a* and *b* above and remove top and bottom covers from rt unit.

(2) Remove the four screws and hardware securing relay bracket assembly 1A20 to chassis mounted spacers. Swing relay bracket assembly 1A20 out of the way.

(3) Remove chassis mounted sleeve spacer located next to filter assembly 1A19.

(4) At top of rt unit, remove countersunk Phillips-head screw and lockwasher, located between rf oscillator 1A9 and mounting bracket, securing filter assembly 1A19 to chassis.

(5) At top of rt unit, remove pan-head Phillips screw and lockwasher, located between SPEAKER switch and NOISE LIMITER switch, securing filter assembly 1A19 to chassis.

(6) At bottom of rt unit, tag and unsolder red wire connected to right-hand terminal of bottom filter component.

(7) Pull out filter assembly 1A19 to gain access to left-hand terminal of bottom filter component.

(8) Tag and unsolder black wire connected to left-hand terminal of bottom filter component.

(9) Pull out filter assembly 1A19 to gain access to the terminals on the top filter component.

(10) Tag and unsolder wires from top filter component and remove filter assembly 1A19 from rt unit.

v. Relay Bracket Assembly 1A20 (fig. 2–3). To remove relay bracket assembly 1A20 from rt unit, proceed as follows:

(1) Refer to *b* above and remove bottom cover from rt unit.

(2) Remove the four screws and hardware securing relay bracket assembly 1A20 to the chassis mounted spacers.

(3) Swing relay bracket assembly 1A20 out to gain access to terminals.

(4) Tag and unsolder wires connected to relay bracket assembly 1A20 and remove relay bracket assembly 1A20 from rt unit.

w. Local Control Filters 1A22 (fig. 2–3). To remove local control filters 1A20 from the rt unit, proceed as follows:

(1) Refer to *a* and *b* above and remove rt unit top and bottom covers.

(2) Refer to *l* above and remove rf oscillator 1A10.

(3) At local control filters 1A22, tag and unsolder all wires from the four terminals.

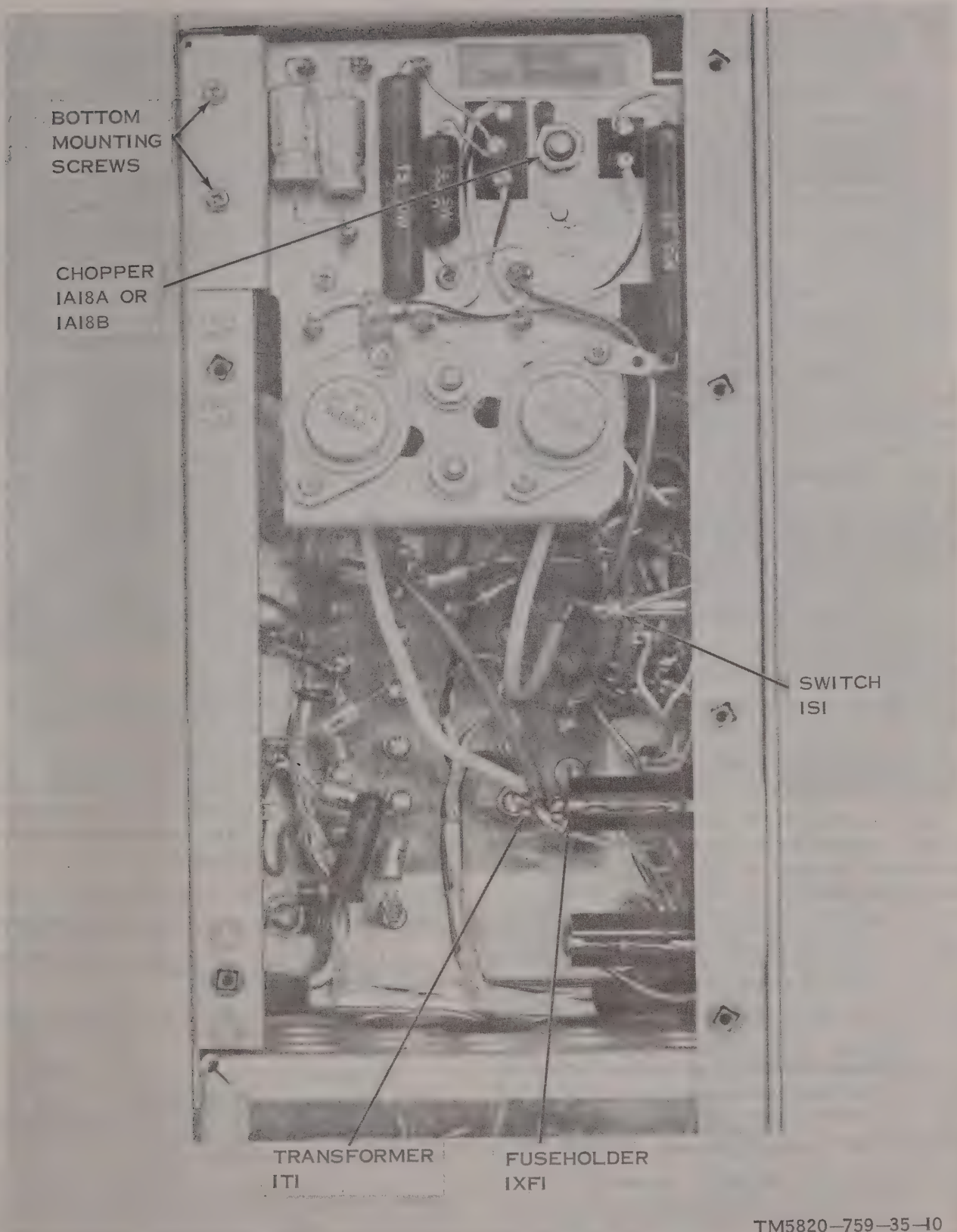


Figure 2-5. Electronic Chopper 1A18B (CV-2486/URC) or 1A18A (CV-2487/URC) installation.

(4) At left-hand side of rt unit, remove two screws securing local control filters 1A22 to the chassis and remove local control filters 1A22 from the rt unit.

x. Speed Decreaser Gear Assembly 1MP70 (fig. 2–2). To remove speed decreaser gear assembly 1MP70 from rt unit, proceed as follows:

(1) Refer to *a* and *b* above and remove rt unit top and bottom covers.

(2) Refer to *k* above and remove rf oscillator 1A9 from rt unit.

(3) At rt unit front panel, set 1 kHz FREQUENCY KILOCYCLES control at 2 and pull out control knob.

(4) At top of rt unit, move speed decreaser gear assembly idler arm towards front panel speaker and slip drive chain off top gear. Tape drive chain to front panel to prevent it from slipping off bottom gear.

(5) Remove three Phillips-head screws and lockwashers securing speed decreaser gear assembly bracket to rt unit chassis and remove speed decreaser gear assembly from rt unit.

y. Speed Decreaser Gear Assembly 1MP71 (fig. 2–2 ①). To remove the speed decreaser gear assembly from the rt unit, proceed as follows:

(1) Refer to *a* above and remove rt unit top cover.

(2) Refer to *c* above step 18 and remove HEADPHONE jack.

(3) At PA TUNE control, loosen two setscrews in control knob and remove control knob. Loosen one setscrew in PA TUNE control dial and remove control dial.

(4) Refer to *e* above steps 10, 11, 12, and remove PA TUNE extension shaft and couplings.

(5) At top of speed decreaser gear assembly, remove four thread-cutting screws and remove gear cover.

(6) Remove three nuts and flatwashers securing speed decreaser gear assembly to front panel studs and remove speed decreaser gear assembly from rt unit.

z. Inductor 1L6 (fig. 2–6). To remove inductor 1L6 from the rt unit, proceed as follows:

(1) Refer to *a* and *b* above and remove rt unit top and bottom covers.

(2) At top of pa. high voltage shield, remove eight screws and lockwashers and remove pa. top cover.

(3) At bottom of rt unit, remove six screws and lockwashers and remove pa. bottom cover.

(4) At top of rt unit at pa. high voltage shield, unsolder 1C24 from 1J30 and disconnect 1P30 from 1J30.

(5) Disconnect filters 1FL1, 1FL2, and 1FL3 and remove pa. tubes 1V1, 1V2, and 1V3.

(6) Refer to *c* above steps 10, 11, 12, and remove PA TUNE extension shaft and couplings.

(7) At pa. high voltage shield, adjacent to pa. tube sockets, remove two screws and lockwashers securing pa. high voltage shield to chassis.

(8) At rear of pa. high voltage shield, remove two nuts and flatwashers securing pa. high voltage shield to chassis.

(9) At left-hand side of rt unit, remove two screws securing pa. high voltage shield to chassis.

(10) At bottom of rt unit, remove two screws and lockwashers securing pa. high voltage shield to chassis and remove pa. high voltage shield from rt unit.

(11) At chassis mounted ground lug adjacent to back end of inductor 1L6, unsolder capacitors 1C4, 1C7, and 1C25.

(12) At front solder terminal on inductor 1L6, unsolder buss wire and capacitor 1C23.

(13) At left-hand side of rt unit, remove two nuts and screws securing inductor 1L6 to chassis. Move inductor 1L6 forward to gain access to rear terminal on inductor 1L6 and unsolder buss wire. Remove inductor 1L6 from rt unit.

aa. Pa. Switch 1S6 (fig. 2–3). To remove pa. switch 1S6 from the rt unit, proceed as follows:

(1) Refer to *a* and *b* above and remove rt unit top and bottom covers.

(2) Refer to *z* above and remove inductor 1L6 (fig. 2–6).

(3) Refer to *c* above steps (3) through (6) and disconnect switch 1S6 shaft.

(4) At relay 1K4, adjacent to pa. switch 1S6, unsolder wire from terminal 12.

(5) At feed-through terminal, adjacent to front end of pa. switch 1S6, unsolder capacitor 1C21.

(6) At top of rt unit, in pa. compartment, remove two screws and lockwashers securing pa.

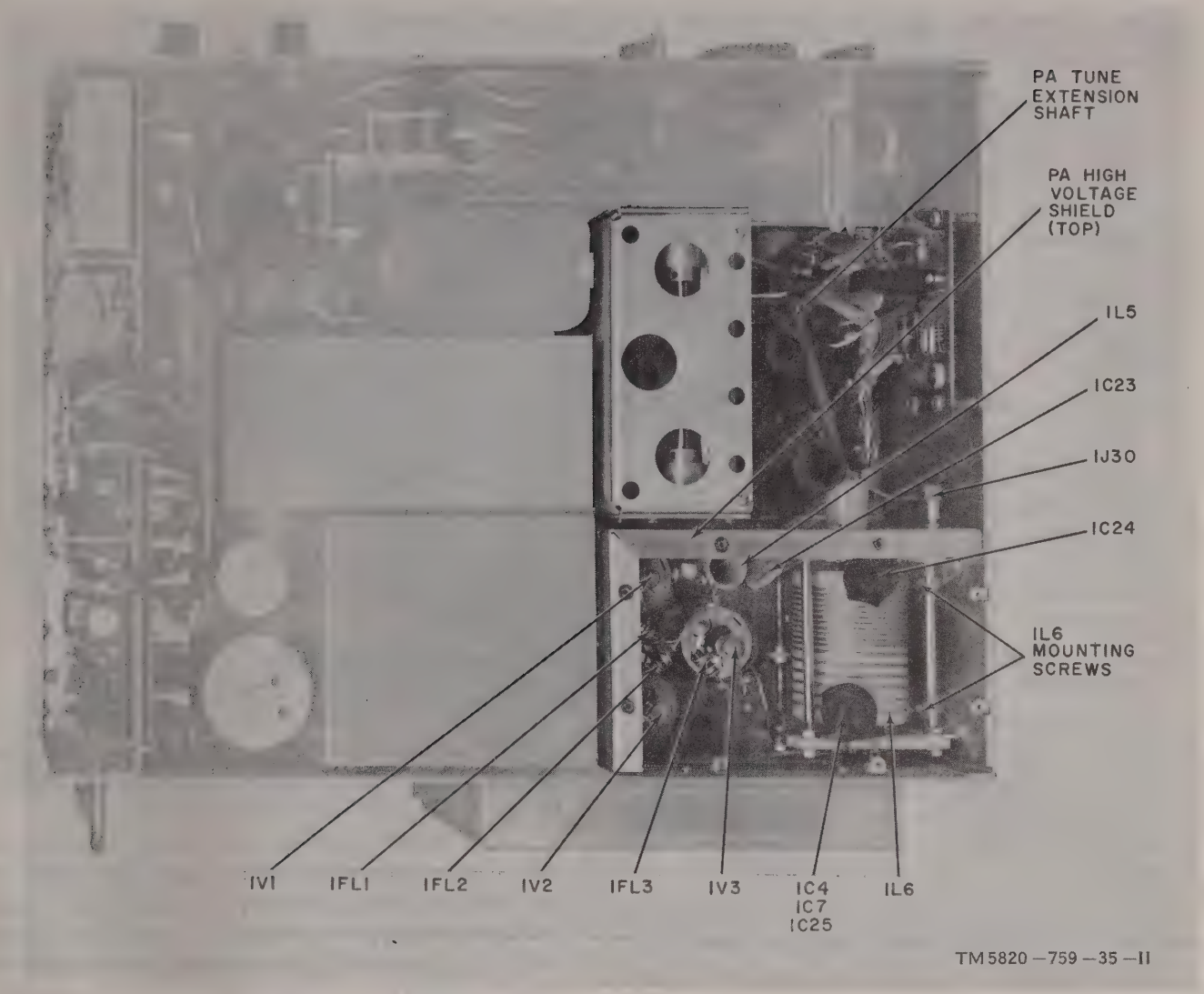


Figure 2–6. Rt Unit pa. section.

switch 1S6 to chassis and remove pa. switch 1S6 from rt unit.

2–12. Antenna Coupler Removal Procedures

NOTE

Refer to fig. 2–7 for location of assemblies.

a. Cover. To remove the antenna coupler cover, remove the eight screws and flatwashers (four on either side) securing the cover to the antenna coupler. Remove the cover.

b. SWR Bridge 2A1 (fig. 2–7). To remove SWR bridge 2A1 from the antenna coupler, proceed as follows:

(1) Refer to *a* above and remove antenna coupler cover.

(2) At SWR bridge 2A1, disconnect coaxial connector 2J3 from connector 2A1P3. Tag and unsolder white/green and white/red wires from top and bottom feedthrough terminals, respectively.

(3) At antenna coupler back panel, remove four screws and lockwashers securing SWR bridge 2A1 to back panel and remove SWR bridge 2A1 from antenna coupler.

2–13. Remote Control Removal Procedures

NOTE

Refer to fig. 2–8 for location of assemblies.

a. Cover. To remove the control cover, proceed as follows:

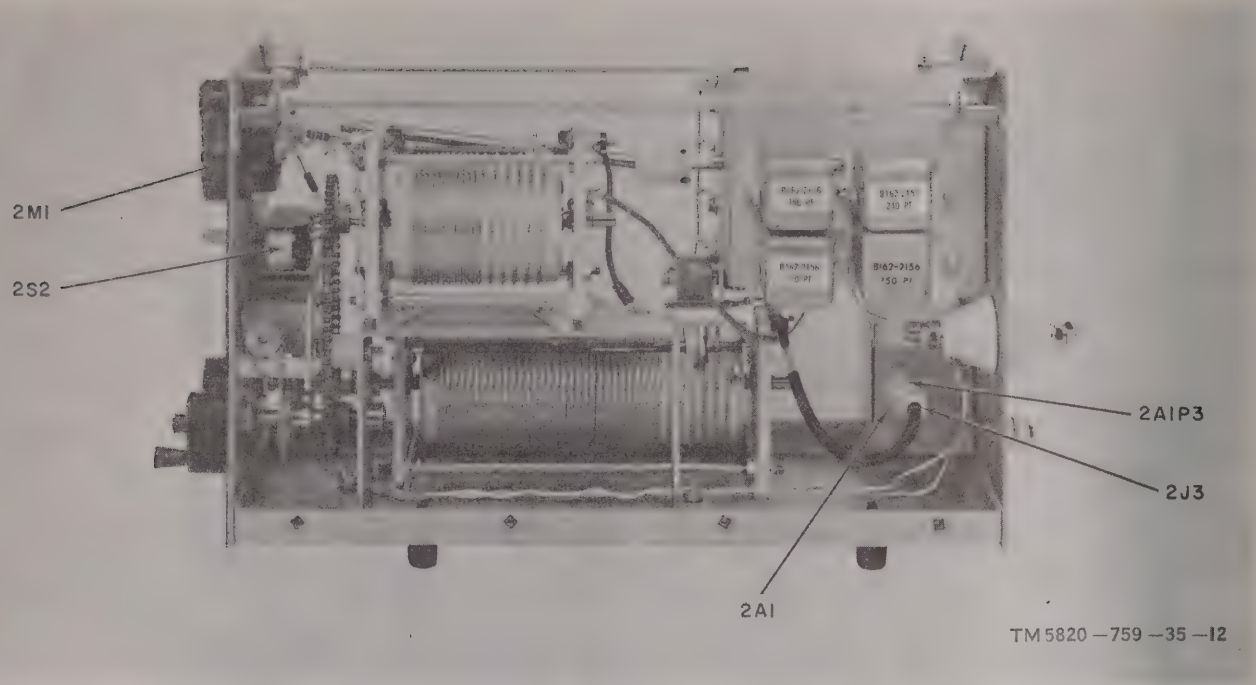


Figure 2-7. Coupler, Antenna, CU-1782/GRC-165 right side view.

(1) Remove hanger bracket knobs and large flatwashers and remove control from hanger bracket.

(2) Remove the four screws and plastic cupwashers (two on either side) and slide control out of the cover.

b. Af Amplifier A1 (fig. 2-8). To remove af amplifier A1 from the control, proceed as follows:

(1) Refer to *a* above and remove control cover.

(2) Pull af amplifier A1 part way out of holder and disconnect multi-pin connector. Remove af amplifier A1 from control.

c. Transformer Assembly A2 (fig. 2-8). To remove transformer assembly A2 from the control, proceed as follows:

(1) Refer to *a* above and remove control cover.

(2) At transformer assembly A2, tag and unsolder all wires.

(3) At bottom of control, remove four screws and lockwashers securing transformer assembly A2 to the control and remove transformer assembly A2 from the control.

2-14. Rt Unit Replacement Procedures

a. Rf Amplifier 1A1 (fig. 6-10). To install rf amplifier 1A1, proceed as follows:

(1) At rt unit front panel, rotate PRESELECTOR control fully counterclockwise and then slightly clockwise so that rigid shaft coupling (31) is parallel to rt unit chassis.

(2) At rf amplifier 1A1, rotate preselector shaft fully counterclockwise and then slightly clockwise so that rigid shaft coupling (22) is perpendicular to rt unit chassis. If rigid shaft coupling is not perpendicular, rotate preselector shaft counterclockwise so that shaft pin is approximately ⅛ of an inch from counterclockwise stop. Loosen setscrews in rigid shaft coupling (22) and set it perpendicular to rt unit chassis and tighten setscrews.

(3) At bottom of rf amplifier 1A1, rotate switch shaft so that notch in switch rotor shaft hole is pointing away from amplifier subassembly 1A1A5.

(4) Position rf amplifier 1A1 over top of rt unit so that notch is on left-hand side and lower rf amplifier 1A1 into chassis while guiding connector (29) cable assembly into notch. Before completely seating rf amplifier 1A1 in rt unit, place flexible shaft coupling (23) on rigid shaft coupling (31) and then seat rf amplifier 1A1, making sure that rigid shaft coupling (22) is properly mated with flexible shaft coupling (23).

(5) Secure rf amplifier 1A1 to chassis with screws (20) and lockwashers (21).

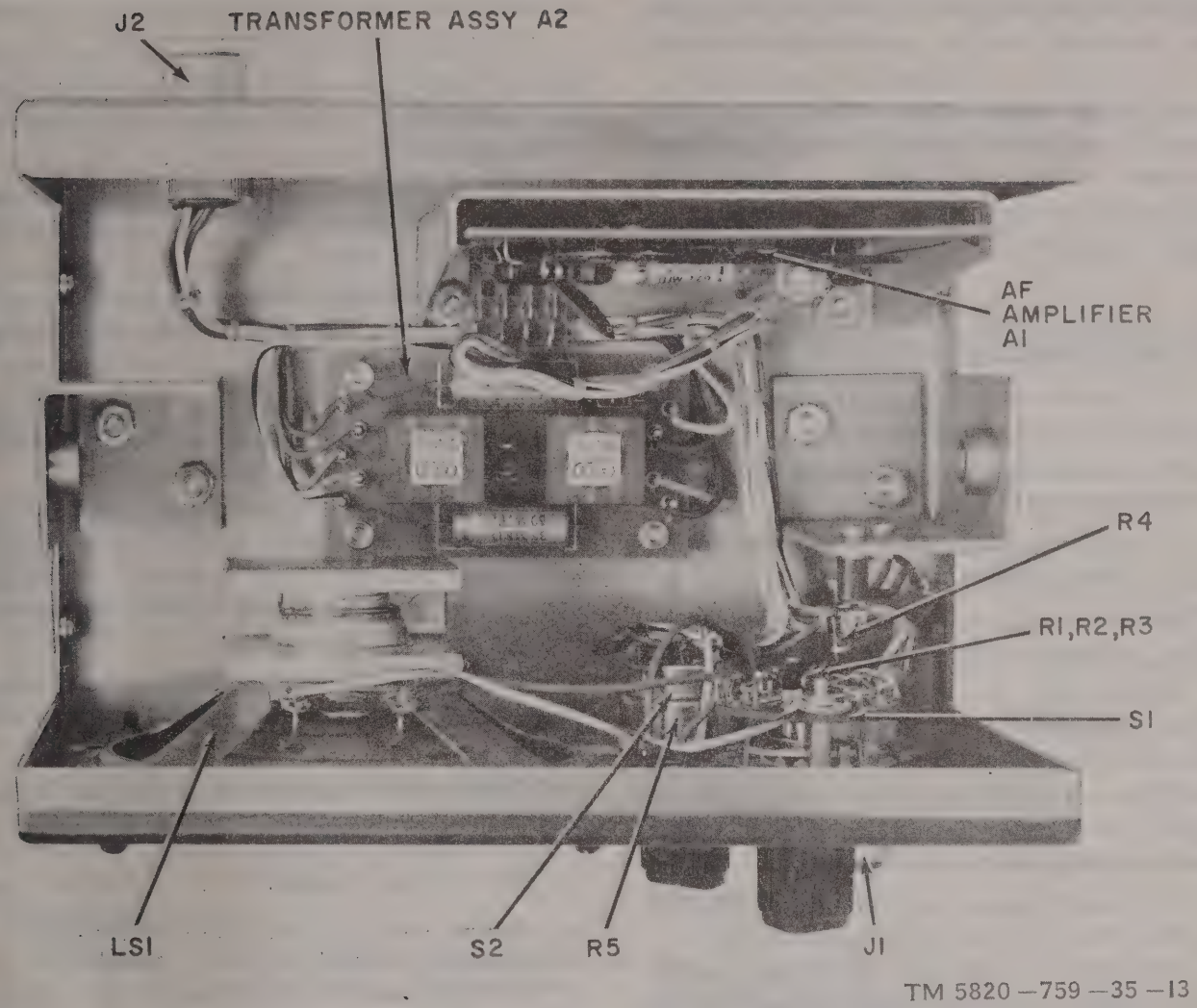


Figure 2–8. Control, Radio Set C–7648/GRC–165 top view.

(6) At front panel, install HEADPHONE jack (19) in opening. Slide HEADPHONE jack cover (30) over HEADPHONE jack bushing and secure both items to front panel with nut (18).

(7) Secure limiter 1A5 (16) to chassis with screws (17).

(8) Solder shield lead (black) of coaxial cable connected to limiter 1A5, to ground lug located on relay 1A1K1 mounting screw.

(9) Solder blue wire to standoff terminal located next to relay 1A1K1.

(10) At relay 1A1K1, solder orange wire connected to 1A5E102 to terminal 8 and solder white/black/yellow wire to terminal 14.

(11) At top of rf amplifier 1A1, reconnect connectors 1P46 (28), 1P31 (29), and 1A1P30 (24).

(12) At front panel, rotate PA TUNE control fully counterclockwise and set at short white line that is above the "A" in "PA".

(13) At pa., rotate shaft (32) fully counterclockwise. Insert shaft (15) into rigid shaft coupling (14) and slide rigid shaft coupling (14) onto shaft (33). Slide rigid shaft coupling (12) onto shaft (32) and insert other end of shaft (15) into rigid shaft coupling (12). Move rigid shaft coupling (12) towards front panel until back edge is flush with pa. high voltage shield. Tighten the four set screws (11) and (13).

(14) At front panel, set 1000 kHz FREQUENCY KILOCYCLES control at 14.

(15) Place flexible shaft coupling (10) on rigid shaft coupling (34) and slide rf amplifier 1A1 switch shaft towards front panel so that

rigid shaft coupling (35) mates with flexible shaft coupling (10). Slide shaft collar (8) back against switch mounting bracket and tighten setscrews (7).

(16) Slide white/yellow wire, connected to terminal 1A1A5E147, through rubber grommet and solder to pa. standoff 1E69.

(17) Solder white/black wire, connected to terminal 1A1A5E148, to feed-through terminal (27).

(18) Solder ground wire, connected to terminal 1A1A5E148, to ground lug (26).

(19) Secure cover (3) to rf amplifier 1A1 with screws (1) and lockwashers (2).

(20) Secure cover (6) to pa. with screws (4) and lockwashers (5).

(21) Refer to paragraph 2–17 to align rf amplifier 1A1 after installation.

b. Synthesizer 1A2 (fig. 2–4). To install synthesizer 1A2 in rt unit chassis, proceed as follows:

(1) Slide synthesizer 1A2 into rt unit chassis and secure using four screws, lockwashers, and flatwashers.

(2) Solder coaxial wire to terminal 1A2E83 and white/black/brown wire to terminal 1A2E81.

(3) Connect coaxial cable connector 1P43 to 1A2J43.

(4) Solder black ground wire to ground terminal mounted on divider. Connect coaxial cable connector 1P46 to 1J46.

(5) Connect coaxial cable connector 1P36 to 1A3J36 and slide rubber grommet into notch in divider.

(6) At frequency mixer 1A4 (fig. 2–2 ①), connect coaxial cable connectors 1P14 and 1P15 (fig. 2–2 ②) to connectors 1A4J14 and 1A4J15.

(7) Refer to paragraph 2–20 to align synthesizer 1A2 after installation. Refer to paragraph 2–25 to adjust input to synthesizer 1A2 from rf oscillator 1A17.

c. Frequency Mixer 1A3 (fig. 2–4). To install frequency mixer 1A3 in the rt unit, proceed as follows:

(1) Slide frequency mixer 1A3 into rt unit and secure to chassis using four screws, lockwashers, and flatwashers. Secure shield to bottom of rt unit chassis using screw and nut.

(2) Solder the black ground wires to the ground lugs mounted on the front and rear dividers.

(3) Slide coaxial cable connector 1J46 through hole in rear divider and secure using nut and lockwasher. Connect coaxial cable connector 1P46 (fig. 2–2 ②).

(4) At translator 1A6, connect coaxial cable connector 1P9 (fig. 2–4) and slide rubber grommet into divider notch.

(5) At frequency mixer 1A3, connect coaxial cable connectors (fig. 2–4) 1P33, 1P34, 1P35, 1P36, and 1P42.

d. Frequency Mixer 1A4 (fig. 2–2 ①). To install frequency mixer 1A4 in the rt unit, proceed as follows:

(1) Slide frequency mixer 1A4 part way into rt unit chassis and connect coaxial cable connector 1P16 (fig. 2–2 ②). Slide assembly completely into rt unit chassis and secure using two screws, lockwashers, and flatwashers.

(2) At frequency mixer 1A4, connect coaxial cable connectors 1P12, 1P13, 1P14, 1P15, and 1P17.

e. Limiter 1A5 (fig. 2–2 ①). To install limiter 1A5 in the rt unit, proceed as follows:

NOTE

During step (1) below, use a 3/16-inch open end wrench to prevent the chassis mounted spacers from turning.

(1) Place limiter 1A5 on chassis mounted spacers and secure using the four nuts, lockwashers, and flatwashers.

(2) Solder the three wires to limiter 1A5.

f. Translator 1A6 (fig. 2–4). To install translator 1A6 in the rt unit, proceed as follows:

(1) Slide translator 1A6 into rt unit and secure with two screws, lockwashers, and flatwashers. Using either a 3/16-inch nut driver or open-end wrench, install the two shield mounting posts.

(2) At the bottom of the divider located between translator 1A6 and frequency mixer 1A3, solder the black ground wire to the ground terminal.

(3) At translator 1A6, solder the red wire to terminal 1A6E62, the white/black/green wire to terminal 1A6E63, the white/black/brown wire to terminal 1A6E61, the two black wires to terminal

1A6E190 (fig. 3–22), and the one black wire to terminal 1A6E189. Connect coaxial cable connectors 1P7, 1P8, 1P9, 1P10, and 1P11.

(4) Secure the shield cover to the two mounting posts using two screws and lockwashers.

g. If. Amplifier 1A7 (fig. 2–3). To install if. amplifier 1A7 in the rt unit, proceed as follows:

(1) Slide if. amplifier 1A7 part way into chassis and connect coaxial cable connectors 1P22 and multi-pin connector 1P20. Slide assembly completely into the chassis and secure with three screws, lockwashers, and flatwashers at bottom of assembly. Solder capacitor 1C57 to terminal 1A7E167 (fig. 3–24).

(2) At top of chassis, install two screws with lockwashers in holes adjacent to chassis mounted connectors 1P18 and 1P23, and secure top of if. amplifier 1A7.

(3) Refer to *d* above and *h* below and install frequency mixers 1A4 and 1A8.

h. Frequency Mixer 1A8 (fig. 2–2 ①). To install frequency mixer 1A8 in rt unit, proceed as follows:

(1) Slide frequency mixer 1A8 part way into rt unit and connect coaxial cable connector 1P25 (fig. 2–2 ②). Slide assembly completely into rt unit, making sure that connectors 1A8J23 and 1P23 are properly mated.

(2) Secure frequency mixer 1A8 to chassis using two screws, lockwashers, and flatwashers. Connect coaxial cable connector 1P24 (fig. 2–2 ②).

(3) At frequency mixer 1A3, connect coaxial cable connectors 1P35 and 1P42.

(4) Refer to paragraph 2–21 to align frequency mixer 1A8 after installation.

I. Rf Oscillator 1A9 (fig. 2–2 ①). To install rf oscillator 1A9 in the rt unit, proceed as follows:

(1) Slide rf oscillator 1A9 into rt unit, making sure that connector pins are properly mated, and solder black wire to eyelet.

(2) Secure rf oscillator 1A9 to bracket using two screws, lockwashers, and flatwashers.

(3) Refer to paragraph 2–22 to align rf oscillator 1A9 after installation.

j Rf Oscillator 1A10 (fig. 2–3). To install rf oscillator 1A10 in the rt unit, proceed as follows:

(1) At rf oscillator 1A10, solder wires to terminals 1A10A1E8 through 1A10A1E13 (fig. 3–30). Insert rf oscillator 1A10 switch shaft in hole in rt unit front panel and secure with shaft nut and lockwasher.

(2) Rotate rf oscillator 1A10 switch shaft fully clockwise and install control knob with numeral 2 adjacent to front panel pointer and secure setscrews.

(3) At divider, located between rf oscillators 1A10 and 1A11, secure ground lug to divider using screw and nut.

(4) Install shield on rf oscillator 1A10 and align solder lug over mounting hole adjacent to divider. Secure shield and solder lug using two screws and one lockwasher.

(5) Refer to *a* above to install rf amplifier 1A1 and to *e* below to install limiter 1A5.

(6) Refer to paragraph 2–23 to align rf oscillator 1A10 after installation.

k. Rf Oscillator 1A11 (fig. 2–3). To install rf oscillator 1A11 in the rt unit, proceed as follows:

(1) At rf oscillator 1A11, solder wires to terminals 1A11A1E18 through 1A11A1E23 (fig. 3–33). Insert rf oscillator 1A11 in hole in front panel and secure with shaft nut and lockwasher.

(2) Rotate rf oscillator 1A11 switch shaft fully clockwise and install control knob with numeral 0 adjacent to the front panel pointer and tighten the setscrews.

(3) At dividers separating rf oscillator 1A11 from rf oscillator 1A10 and rf oscillator 1A12, secure the two ground lugs using screws and nuts.

(4) Install shield on rf oscillator 1A10 and align ground lug over mounting hole adjacent to divider. Secure ground lug and shield using two screws and one lockwasher.

(5) Refer to *a* above to install rf amplifier 1A1 and *e* above to install limiter 1A5.

l. Rf Oscillator 1A12 (fig. 2–3). To install rf oscillator 1A12 in the rt unit, proceed as follows:

(1) At rf oscillator 1A12, solder wires to terminals 1A12A1E30 through 1A12A1E35 (fig. 3–36). Insert rf oscillator 1A12 in hole in front panel and secure with shaft nut and lockwasher.

(2) Rotate rf oscillator 1A12 switch shaft fully clockwise and install control knob with numeral 0 adjacent to the front panel pointer and tighten the setscrews.

(3) At divider, separating rf oscillator 1A11 and rf oscillator 1A12, secure terminal lug with screw and nut.

m. Rf Oscillator 1A13 (fig. 2-3). To install rf oscillator 1A13 in the rt unit, proceed as follows:

(1) Pull out 1 kHz FREQUENCY KILOCYCLES control knob.

(2) Slide rf oscillator 1A13 into chassis and position on front panel mounted spacers, guiding shaft into shaft coupling on rf oscillator 1A13.

(3) At top of rf oscillator 1A13, tighten the two slotted-head screws. Secure bottom of rf oscillator 1A13 to the vfo micro-switch mounting bracket and the front panel mounted spacer.

(4) Solder wire to terminals (fig. 3-39) 1A13A1E42 through 1A13A1E47 and solder the two black wires to the ground lug on relay bracket 1A20.

n. Limiter 1A14 (fig. 2-3). To install limiter 1A14 in rt unit, proceed as follows:

(1) Slide limiter 1A14 into rt unit chassis, mating pins on limiter 1A14 with chassis mounted pin connector.

(2) Secure limiter 1A14 to the spacers mounted on the rt unit rear panel using two Phillips-head screws and hardware.

o. Limiter 1A15 (fig. 2-3). To install limiter 1A15 in the rt unit, proceed as follows:

(1) Slide limiter 1A15 into chassis, mating pins on limiter 1A15 with chassis mounted pin connector.

(2) Secure limiter 1A15 to spacers mounted on partition using two Phillips-head screws and hardware.

(3) Refer to paragraph 2-24 to align limiter 1A15 after installation.

p. Af Amplifier 1A16 (fig. 2-2 ①). To install af amplifier 1A16 in rt unit, slide af amplifier 1A16 into holder and connect pin connector 1P26 to connector 1A16J26 (fig. 3-46).

q. Rf Oscillator 1A17 (fig. 2-2 ①). To install rf oscillator 1A17 in the rt unit, proceed as follows:

(1) At top of rt unit, install rf oscillator 1A17.

(2) At bottom of rt unit, secure rf oscillator 1A17 to rt unit chassis using three nuts and lockwashers. Solder all wires to rf oscillator 1A17.

(3) If rt unit is equipped with chopper 1A18A or 1A18B, refer to *r* below and install chopper 1A18A or 1A18B.

(4) Refer to paragraph 2-25 to align rf oscillator 1A17 after installation.

r. Chopper 1A18A or 1A18B (fig. 2-5). To install chopper 1A18B, either 26.0 vdc chopper (CV-2486/URC) or 13.5 vdc chopper 1A18A (CV-2487/URC), in the rt unit, proceed as follows:

(1) Position chopper 1A18A or 1A18B on rt unit and solder yellow wire to switch 1S1-A terminal 3.

(2) Slide chopper into rt unit and secure to bottom partition using two Phillips-head screws and lockwashers. At top of rt unit adjacent to rf oscillator 1A17, install two Phillips-head screws and lockwashers in the top chassis mounting holes.

(3) Solder the red wire to the end terminal of fuse holder XF1.

(4) Solder the blue wire to terminal 7 of transformer 1T1.

(5) For 13.5 vdc chopper 1A18A (CV-2487/URC) solder the two black wires to transformer 1T1, one wire to terminal 6 and one to terminal 8.

(6) For 26.0 vdc chopper 1A18B (CV-2486/URC) solder the two white wires to transformer 1T1, one wire to terminal 5 and one to terminal 9.

s. Filter Assembly 1A19 (fig. 2-3). To install filter assembly 1A19 in rt unit, proceed as follows:

(1) At bottom of rt unit, slide filter assembly 1A19 part way into rt unit and solder all wires to filter components. Slide filter assembly 1A19 completely into rt unit.

(2) At top of rt unit, install countersunk Phillips screw with lockwasher in hole located between rf oscillator 1A9 and mounting bracket and secure filter assembly 1A19 to rt unit chassis.

(3) At top of rt unit, install pan-head Phillips screw with lockwasher in hole located between SPEAKER switch and NOISE LIMITER switch, and secure filter assembly 1A19 to rt unit chassis.

(4) At bottom of rt unit, install sleeve spacer on chassis mounted stud. Position relay bracket assembly 1A20 on sleeve spacers and secure with Phillips-head screws and hardware.

(5) Refer to paragraph 2-26 to align filter assembly 1A19 after installation.

t. Relay Bracket Assembly 1A20 (fig. 2-3). To install relay bracket assembly 1A20 in rt unit, proceed as follows:

(1) At bottom of rt unit, position relay bracket assembly 1A20 next to the four chassis

mounted sleeve spacers and solder all wires to relay bracket assembly 1A20.

(2) Position relay bracket assembly 1A20 on top of chassis mounted sleeve spacers and secure using four Phillips-head screws and lockwashers.

u. Local Control Filters 1A22 (fig. 2–3). To install local control filters 1A22 in the rt unit, proceed as follows:

(1) Position local control filters 1A22 on rt unit chassis and secure using two screws.

(2) At local control filters 1A22, solder all wires to the four terminals.

(3) Refer to *j* above and install rf oscillator 1A10.

v. Speed Decreaser Gear Assembly 1MP70 (fig. 2–2 ①). To install vfo gear drive in rt unit, proceed as follows:

(1) Place vfo gear drive on rt unit chassis and secure using three Phillips-head screws and lockwashers.

(2) Position vfo gear drive capacitor so that edge of rotor is centered under top solder terminal.

(3) Preventing drive chain from slipping off lower drive gear, remove tape securing drive chain to front panel and set 1 kHz FREQUENCY KILOCYCLES control at 2. Move vfo gear drive idler arm towards front panel speaker and slide drive chain over top drive gear. Release idler arm and make sure that drive chain is centered on idler wheel.

(4) Refer to *i* above and install rf oscillator 1A9.

w. Speed Decreaser Gear Assembly 1MP71 (fig. 2–2). To install the pa. tune gear drive in the rt unit, proceed as follows:

(1) At pa. tune gear drive, remove four thread-cutting screws and remove gear cover. Place pa. tune gear drive on front panel studs and secure with three nuts and flatwashers. Install gear cover on pa. tune gear drive and secure with the four thread-cutting screws.

(2) At rt unit front panel, install and secure PA TUNE control dial and control knob.

(3) Refer to *a* above steps 12 and 13 and install pa. extension shaft and couplings.

(4) Refer to *a* above step 6 and install HEADPHONE jack.

x. Inductor 1L6 (fig. 2–6). To install inductor 1L6 in the rt unit, proceed as follows:

(1) Position inductor 1L6 in the rt unit chassis and solder buss wire, coming through chassis from switch 1S6, to rear terminal on inductor 1L6. Secure inductor 1L6 to rt unit chassis using two nuts and screws.

(2) At chassis mounted ground lug, adjacent to back end of inductor 1L6, solder capacitors 1C4, 1C7, and 1C25.

(3) At front solder terminal on inductor 1L6, solder buss wire, coming through chassis from switch 1S6 (fig. 2–3), and capacitor 1C23.

(4) Position pa. high voltage shield on rt unit chassis and secure.

(5) Install pa. tubes 1V1, 1V2, and 1V3.

(6) Secure connector 1J30 to pa. high voltage shield and connect 1P30 to 1J30.

(7) Refer to *a* above steps 12 and 13 and install PA TUNE extension shaft.

(8) Install and secure pa. top and bottom covers.

y. Pa. Switch 1S6 (fig. 2–3). To install pa. switch 1S6 in the rt unit, proceed as follows:

(1) Position pa. switch 1S6 in lower pa. compartment with the two buss wires protruding through the grommeted holes into the upper pa. compartment. Secure pa. switch 1S6 to chassis using two screws and lockwashers.

(2) At feed-through terminal, adjacent to front end of pa. switch 1S6, solder capacitor 1C21.

(3) At relay 1K4, adjacent to pa. switch 1S6, solder wire, from pa. switch 1S6, to terminal 12.

(4) Refer to *a* above steps 14 and 15 and engage pa. switch 1S6 shaft.

(5) Refer to *x* above and install inductor 1L6.

z. Rt Unit Top Cover. To install the rt unit top cover, slide rt unit top cover onto rt unit and secure with twelve screws (six on either side).

aa. Rt Unit Bottom Cover. To install the rt unit bottom cover, proceed as follows:

(1) Place bottom cover on rt unit, making sure that blower connector pins are properly mated.

(2) Secure bottom cover to rt unit using 22 screws and hardware.

2–15. Antenna Coupler Replacement Procedures

NOTE

Refer to fig. 2–7 for location of assemblies.

a. SWR Bridge 2A1. To install SWR bridge 2A1 in the antenna coupler, proceed as follows:

(1) Position SWR bridge 2A1 on antenna coupler back panel, with connector 2A1P3 on right hand side. Secure SWR bridge 2A1 to antenna coupler back panel using four screws and lockwashers.

(2) At SWR bridge 2A1, solder white/green and white/red wires to the top and bottom feedthrough terminals, respectively. Connect coaxial connector 2J3 to connector 2A1P3.

b. Cover. To install the antenna coupler cover, slide cover onto antenna coupler and secure using eight screws and flatwashers (four on either side).

2–16. Remote Control Replacement Procedures

NOTE

Refer to fig. 2–8 for location of assemblies.

a. Af Amplifier A1. To install af amplifier A1 in the remote control, slide af amplifier A1 part way into holder. Connect multi-pin connector and slide af amplifier A1 the rest of the way into holder.

b. Transformer Assembly A2. To install transformer assembly A2 in the remote control, proceed as follows:

(1) Position transformer assembly A2 in remote control with terminals A through E at the right-hand side, viewed from the front panel.

(2) Secure transformer assembly A2 to remote control using four screws and lockwashers.

c. Cover. To install the remote control cover, proceed as follows:

(1) Slide cover on remote control and secure using four screws and plastic cupwashers (two on either side).

(2) Slide remote control into hanger bracket and secure using the hanger bracket knobs and two large flatwashers.

Section VI. GENERAL SUPPORT ALIGNMENT PROCEDURES

2–17. General

a. This section contains the necessary alignment procedures required on the rt unit assemblies after installation in the rt unit.

b. These assemblies are rf amplifier 1A1, synthesizer 1A2, frequency mixer 1A8, rf oscillator 1A9, rf oscillator 1A10, limiter 1A15, rf oscillator 1A17, and filter assembly 1A19.

NOTE

After completing the necessary alignment procedures in this section, refer to paragraph 2–5*b* and perform the performance test to check the overall operation of the unit.

2–18. Test Equipment Required For Alignment

The following is a list of the test equipment required for aligning the assemblies after replacement. Additional items are listed in *b* below.

a. Test Equipment.

Equipment	Qty	Technical manual
Multimeter ME–26(*)/U	1	TM 11–6625–200–15
Dummy Load, Electrical DA–75/U.	1	TM 11–6625–446–15
Oscilloscope AN/USM–281	1	TM 11–6625–1703–15
Electronic Counter AN/USM–207	1	TM 11–6625–700–10
Signal Generator AN/URM–127	1	TM 11–6625–683–15
Microphone M–143/GR	1	

b. Additional Equipment.

(1) Cable W7.

(2) Adapter UG–201/U.

(3) Adapter UG–273/U.

(4) HP–11042A T-Connector.

2–19. Rf Amplifier 1A1

To align rf amplifier 1A1 after installation in the rt unit, perform the following procedures:

a. Connect the test equipment to rf unit as shown in figure 2–1 (transmit).

b. At rt unit front panel, set FUNCTION switch at STBY and allow one minute for warm-up.

c. At rt unit front panel, set FUNCTION switch at CW and FREQUENCY KILOCYCLES controls at 8999 kHz.

d. Set PA TUNE and PRESELECTOR controls at the 8 MCS range, RF GAIN control fully clockwise.

e. Adjust PRESELECTOR control for maximum receive audio output. Set TRANSMIT AUDIO control at the TUNE position. Key rt unit and carefully adjust PA TUNE and PRESELECTOR controls for peak indication on the ME–26(*)/U. Unkey rt unit. Rotate TRANSMIT AUDIO control fully counterclockwise. Key rt unit and rotate TRANSMIT AUDIO control clockwise until a 25 watt output is indicated on rt unit front panel meter or 35 vac on ME–26(*)/U. Carefully adjust PRESELECTOR control to obtain a peak indication on the rt unit front panel meter. Rotate TRANSMIT AUDIO control clockwise until a 100 watt output is indicated on the rt unit front panel meter, 70.7 vac on ME–26(*)/U. Unkey rt unit.

f. Loosen setscrews on PA TUNE and PRESELECTOR knob skirts. Align skirt pointers at the clockwise edge marks of the 8 MCS tuning area. Carefully tighten setscrews.

g. Set FREQUENCY KILOCYCLES controls at 2999 kHz. Refer to step *e* above and set output power at 50 watts, 50 vac on ME–26(*)/U.

NOTE

Make sure bottom cover of rf amplifier 1A1 is installed. Capacitor locations are identified on bottom covers.

NOTE

In steps *h*, *j*, *l*, and *n* trim first three capacitors listed with rt unit adjusted for 50 watts output and last capacitor listed with rt unit adjusted for 100 watts.

h. At bottom of rf amplifier 1A1 (rt unit keyed) (fig. 3–6 ②) adjust capacitors 1A1A5C36, 1A1A5C37, 1A1A5C38, and 1A1A5C40 for a peak output indication on ME–26(*)/U. Unkey rt unit.

i. Set FREQUENCY KILOCYCLES controls at 4500 kHz. Refer to *e* above and set output power at 50 watts.

j. At bottom of rf amplifier 1A1 (fig. 3–6 ①) (rt unit keyed) adjust capacitors 1A1A1C4, 1A1A2C16, 1A1A3C23, and 1A1A4C31 for a peak output indication on ME–26(*)/U. Unkey rt unit.

k. Set FREQUENCY KILOCYCLES controls at 8200 kHz. Refer to *e* above and set output power at 50 watts.

l. At bottom of rf amplifier 1A1 (rt unit keyed) adjust capacitors 1A1A1C1, 1A1A2C13, 1A1A3C20, and 1A1A4C28 for a peak output indication ME–26(*)/U. Unkey rt unit.

m. Set FREQUENCY KILOCYCLES controls at 14994 kHz. Refer to *e* above and set output power at 50 watts.

n. At bottom of rf amplifier 1A1 (rt unit keyed) adjust capacitors 1A1A1C6, 1A1A2C18, 1A1A3C25, and 1A1A4C33 for a peak output indication on ME–26(*)/U. Unkey rt unit.

o. At amplifier subassembly 1A1A6, connect ME–26(*)/U dc probe to grid side of resistor 1A1A6R3. Adjust resistor 1A1A6R31 to obtain a ME–26(*)/U indication of +0.2 Vdc and an S-meter indication of 0.

p. Refer to TM 11–5820–759–12, and check pa. bias. Adjust if necessary. Reconnect ME–26A/U ac probe to T-connector at Dummy Load DA–75/U, refer to fig. 2–1 (transmit).

q. At rt unit front panel, set FREQUENCY KILOCYCLES controls at 14999 kHz. Refer to step *e* above and set output power at 100 watts.

r. Key rt unit. Output indication on ME–26A/U should be at least 70.7 vac with rt unit front panel meter indicating 100 watts. Unkey rt unit.

s. At rt unit front panel, set FREQUENCY KILOCYCLES controls at 2999 kHz. Refer to step *e* above and set output power at 100 watts.

t. Key rt unit. Output indication on ME–26A/U should be at least 70.7 vac, with rt unit front panel meter indicating 100 watts. Unkey rt unit.

2–20. Synthesizer 1A2

To align synthesizer 1A2 after installation in the rt unit, perform the following procedures.

a. Connect the test equipment to the rt unit as shown in figure 2–1 (transmit) and energize.

b. At rt unit, set FUNCTION switch at STBY and allow 20 minutes for warmup.

c. At rt unit, set FUNCTION switch at USB and FREQUENCY KILOCYCLES controls at 2999 kHz.

NOTE

Make sure oscilloscope AN/USM–281 probe is calibrated.

d. At synthesizer 1A2, connect AN/USM–281 probe to the junction of resistors 1A2R68,

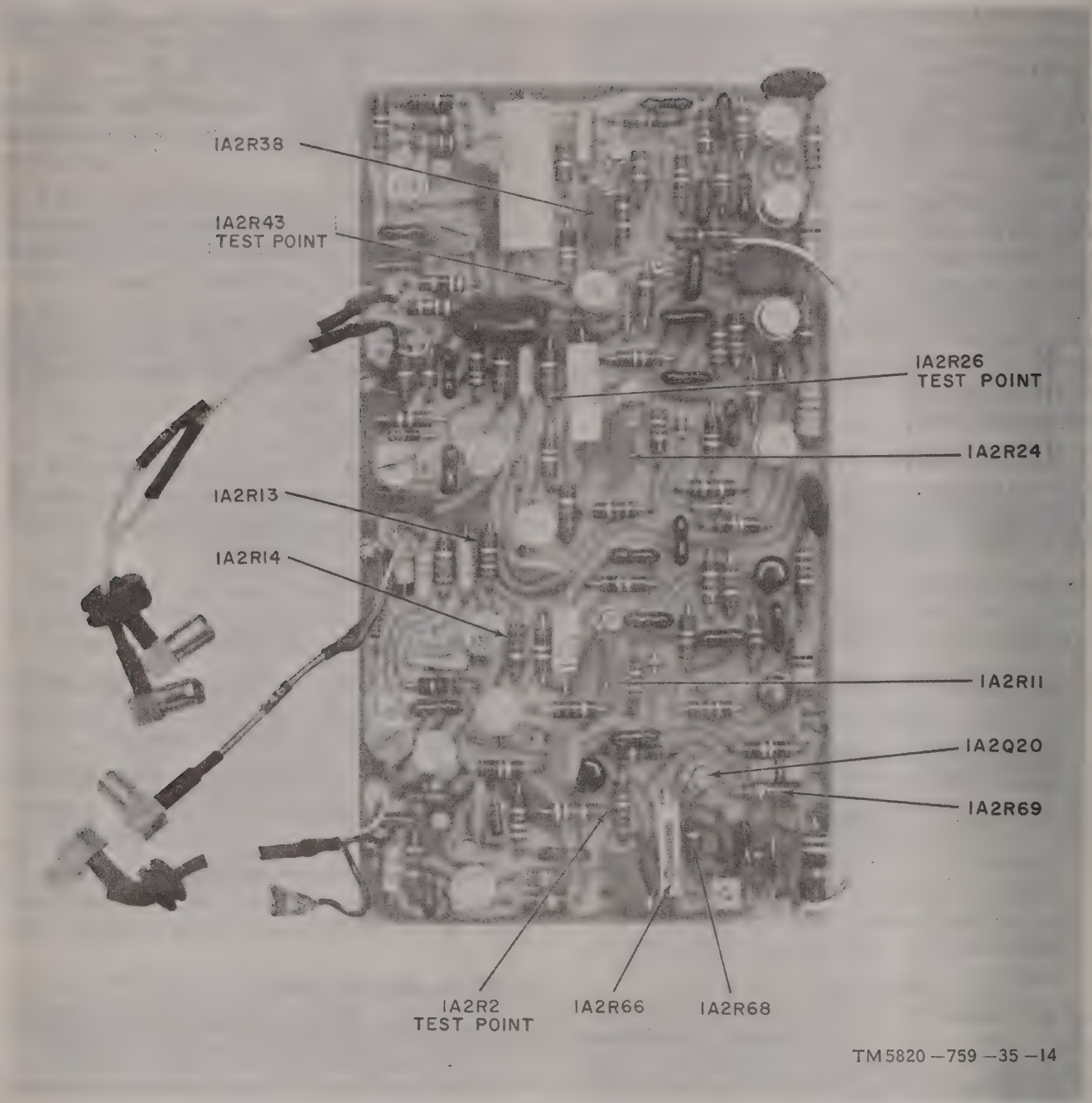


Figure 2–9. Synthesizer 1A2 test point locations.

1A2R69 (fig. 3–10), and the base of transistor 1A2Q20 (fig. 2–9). Amplitude of displayed 1 MHz sine wave should be 2.1 volts peak-to-peak. If amplitude is not correct, at rf oscillator 1A17 adjust AMPL. ADJ. control to obtain the proper indication. Disconnect AN/USM–281.

e. At synthesizer 1A2, connect AN/USM–281 probe to the junction of resistor 1A2R2 and the collector of transistor 1A2Q1 (fig. 2–9 and 3–10). Adjust resistor 1A2R66 (fig. 2–9), to obtain a pulse width of 0.25 usec as shown in figure 2–10.

NOTE

The pulse width for this adjustment is measured across the flat portion at the top of the displayed pulse.

f. At synthesizer 1A2, connect AN/USM–281 probe to the junction of resistors 1A2R13 and

1A2R14 (fig. 2–9 and 3–10). Adjust resistor 1A2R11 (fig. 2–9 and 3–10), to the center of the range that produces the waveform as shown in figure 2–11.

g. Connect AN/USM–281 probe to the junction of resistor 1A2R26 and the collector of transistor 1A2Q9 (fig. 2–9 and 3–10). Adjust resistor 1A2R24 (fig. 2–9 and 3–10), to the center of the range that produces the waveform as shown in figure 2–12. Disconnect AN/USM–281 probe.

h. Connect AN/USM–281 probe to the junction of resistor 1A2R43 and the collector of transistor 1A2Q13 (fig. 2–9 and 3–10). Adjust resistor 1A2R38 (fig. 2–9 and 3–10), to the center of the range that produces the waveform as shown in figure 2–13. Disconnect AN/USM–281.

2–21. Frequency Mixer 1A8

To align frequency mixer 1A8 after installation in the rt unit, perform the following procedures.

a. Refer to figure 2–1 (transmit) and connect the test equipment to the rt unit.

b. At rt unit front panel, set FREQUENCY KILOCYCLES controls at 3023 kHz and FUNCTION switch at CW. Key and tune rt unit to full power output, 70.7 Vac on ME–26(*)/U. Unkey rt unit.

c. Set FUNCTION switch at LSB and rotate TRANSMIT AUDIO control fully counterclockwise.

d. At frequency mixer 1A8 (rt unit keyed) adjust resistor 1A8R56 (fig. 3–26) and capacitor 1A8C58 to obtain a null indication on ME–26A/U. Unkey rt unit.

2–22. Rf Oscillator 1A9

To align the rf oscillator 1A9 after installation in the rt unit, perform the following procedures.

a. At rt unit front panel, set FREQUENCY

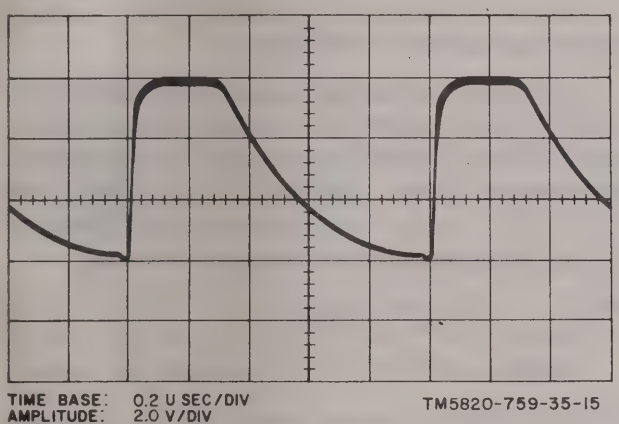


Figure 2–10. Transistor 1A2Q1 collector waveform.

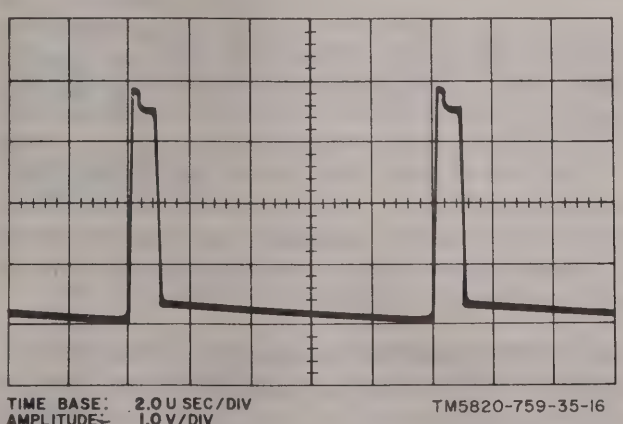


Figure 2–11. Transistor 1A2Q16 base waveform.

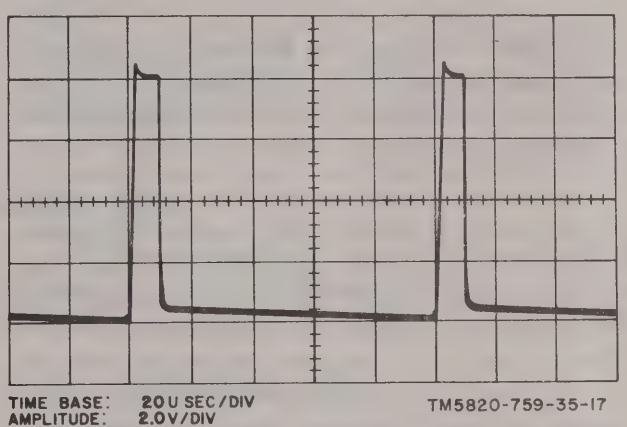


Figure 2–12. Transistor 1A2Q9 collector waveform.

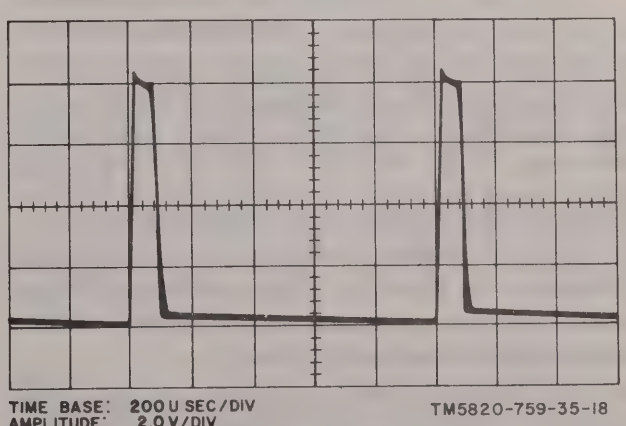


Figure 2–13. Transistor 1A2Q13 collector waveform.

KILOCYCLES controls at 2555 kHz and FUNCTION switch at USB.

b. At frequency mixer 1A3, disconnect 1P35 from 1A3J35 (fig. 2–4).

c. At rf oscillator 1A13 (fig. 2–3), connect the AN/USM–207 to terminal 1A13E47 (fig. 3–39).

NOTE

1A9C13 is located on a bracket and is not shown on figure 3–28.

d. At rt unit front panel, set 1 kHz FREQUENCY KILOCYCLES control at O, pull out the control to activate vfo and set control at 2. Vfo tuning capacitor 1A9C13 (fig. 1–6) should be half-meshed.

NOTE

When setting the 1 kHz FREQUENCY KILOCYCLES control to a required frequency, always approach the setting from a clockwise direction.

e. At rt unit front panel, align 0 on 1 kHz FREQUENCY KILOCYCLES control with indicator above control. At rf oscillator 1A9, adjust 1A9C1 (fig. 3–28) until AN/USM–207 indicates 798.500 kHz ±25 Hz.

f. At rt unit front panel, align 10 to 1 kHz FREQUENCY KILOCYCLES control with indicator above control. If AN/USM–207 indicates frequency above 788.500 kHz (but not more than 300 Hz above) proceed to step *h* below. If AN/USM–207 indicates frequency below 788.500 kHz (but not more than 150 Hz below) proceed to step *i* below. If AN/USM–207 indicates frequency more than 300 Hz above or 150 Hz below 788.500 kHz, proceed to step *g* below.

g. If the AN/USM–207 indicates a frequency more than 300 Hz *above* 788.500 kHz, set 1 kHz FREQUENCY KILOCYCLES control at 4, loosen the two setscrews fastening the capacitor drive gear to 1A9C13, half-mesh 1A9C13 and tighten setscrews. If the AN/USM–207 indicates a frequency more than 150 Hz *below* 788.500 kHz, set 1 kHz FREQUENCY KILOCYCLES control at 0, loosen the two setscrews fastening the capacitor drive gear to 1A9C13, half-mesh 1A9C13 and tighten setscrews. Repeat steps *e*, *f*, and *g* above until the results are acceptable.

h. If AN/USM–207 indicates a frequency above 788.500 kHz, calculate the difference, in Hertz, between 788.500 kHz and the indicated frequency. Divide the difference by 25. At rf oscillator 1A9, adjust 1A9C1 counterclockwise the number of turns calculated above, then proceed to step *j* below.

i. If AN/USM–207 indicates a frequency below 788.500 kHz, calculate the difference, in Hertz, between 788.500 kHz and the indicated frequency. Divide the difference by 25. At rf oscillator 1A9, adjust 1A9C1 clockwise the number of turns calculated above, then proceed to step *j* below.

j. At rf oscillator 1A9, adjust inductor 1A9L1 (fig. 3–28) to obtain approximately 788.500 kHz and adjust 1A9L2 as a fine adjustment to obtain 788.500 kHz ±25 Hz.

k. At frequency mixer 1A3, reconnect 1P35 to 1A3J35.

2–23. Rf Oscillator 1A10

To align rf oscillator 1A10 after installation in the rt unit, perform the following procedures.

a. Refer to figure 2–1 (transmit) and connect the test equipment to the rt unit.

b. At rt unit front panel, set FREQUENCY KILOCYCLES controls at 13005 kHz, FUNCTION switch at CW, and tune rt unit for maximum output (70.7 Vac on ME–26(*)/U). Set FUNCTION switch at LSB and rotate TRANSMIT AUDIO control fully counterclockwise.

NOTE

Set ME–26(*)/U at 10 Vac range.

c. Key rt unit (no modulation) and carefully adjust the PRESELECTOR control to obtain maximum response to the spurious signal at 12741 kHz.

d. At rf oscillator 1A10, adjust capacitor 1A10C4 (fig. 3–30) to null the spurious signal. Unkey the rt unit and set ME–26(*)/U at the 100 Vac range.

e. At the rt unit front panel, set FUNCTION switch at CW. Key the rt unit and adjust PRESELECTOR control to obtain maximum response at 13005 kHz to insure that rf oscillator 1A10 is still operating. Unkey rt unit.

f. At rt unit front panel, set FREQUENCY KILOCYCLES controls at 11915 kHz and tune rt unit for maximum output. Set FUNCTION switch at LSB and rotate TRANSMIT AUDIO control fully counterclockwise.

NOTE

Set ME-26(*)/U at the 10 Vac range.

g. Key rt unit and adjust PRESELECTOR control to obtain maximum response to the spurious signal at 12494 kHz.

h. At rf oscillator 1A10, adjust capacitor 1A10C3 (fig. 3-30) to null the spurious signal. Unkey rt unit and set ME-26(*)/U at the 100 Vac range.

i. At rt unit front panel, set FUNCTION switch at CW. Key rt unit and adjust PRESELECTOR control to obtain maximum response at 11915 kHz to insure that rf oscillator 1A10 is still operating. Unkey rt unit.

j. At rt unit front panel, set FREQUENCY KILOCYCLES controls at 9005 kHz. Tune rt unit for maximum output. Set FUNCTION switch at LSB and rotate TRANSMIT AUDIO control fully counterclockwise.

NOTE

Set ME-26(*)/U at the 10 Vac range.

k. Key rt unit and adjust PRESELECTOR control to obtain maximum response to the spurious signal at 8247 kHz.

l. At rf oscillator 1A10, adjust capacitor 1A10C2 (fig. 3-30) to null the spurious signal. Unkey rt unit and set ME-26(*)/U at the 100 Vac range.

m. At rt unit front panel, set FUNCTION switch at CW. Key rt unit and adjust PRESELECTOR control to obtain maximum response at 9005 kHz to insure that rf oscillator 1A10 is still operating. Unkey rt unit.

n. At rt unit front panel, set FREQUENCY KILOCYCLES controls at 8915 kHz. Tune rt unit for maximum output. Set FUNCTION switch at LSB and rotate TRANSMIT AUDIO control fully counterclockwise.

NOTE

Set ME-26(*)/U at the 10 Vac range.

o. Key rt unit and adjust PRESELECTOR control to obtain maximum response to the spurious signal at 9247 kHz.

p. At rf oscillator 1A10, adjust capacitor 1A10C1 (fig. 3-30) to null the spurious signal. Unkey rt unit and set ME-26(*)/U at the 100 Vac range.

q. At rt unit, set FUNCTION switch at CW. Key rt unit and adjust PRESELECTOR control to obtain maximum response at 8915 kHz to insure that rf oscillator 1A10 is still operating. Unkey rt unit.

r. Check PRESELECTOR pointer calibration by tuning receiver to 8999 kHz. PRESELECTOR pointer should be aligned with the clockwise mark on the 8 MHz range. If it is not aligned with this mark, refer to paragraph 2-19 step *f* and align PRESELECTOR pointer.

2-24. Limiter 1A15

After limiter 1A15 has been installed in the rt unit, the automatic carrier control (acc) circuitry must be adjusted. To adjust the acc, perform the following procedures.

a. Refer to figure 2-1 (transmit) and connect the test equipment to the rt unit.

b. At rt unit front panel, set FREQUENCY KILOCYCLES controls at 7555 kHz and FUNCTION switch at CW. Key and tune the rt unit for maximum output so that the rt unit is operating with alc. Unkey the rt unit and set FUNCTION switch at AM.

c. At limiter 1A15, adjust, with rt unit keyed, resistor 1A15R6 (fig. 3-44) to obtain a 42 Vac indication on the ME-26(*)/U. Unkey the rt unit.

2-25. Rf Oscillator 1A17

To adjust rf oscillator 1A17 after installation in the rt unit, proceed as follows:

NOTE

Do not key rt unit.

a. At rt unit front panel, set FREQUENCY KILOCYCLES controls at any frequency and FUNCTION switch at any mode other than OFF or STBY.

b. At synthesizer 1A2, connect AN/USM-281 oscilloscope probe to the junction of resistors 1A2R68, 1A2R69, and the base of transistor 1A2Q2 (fig. 2-9).

c. At rf oscillator 1A17 (fig. 2-2①), adjust AMPL. ADJ. control to obtain a 2.1 volt peak-to-peak indication of the 1 MHz displayed waveform on the AN/USM-281 (parts location illustration for rf oscillator 1A17 cannot be provided).

2–26. Filter Assembly 1A19

To align filter assembly 1A19 after installation in the rt unit, perform the following procedures.

a. Refer to paragraph 2–11*a* and *b* and remove the top and bottom covers from the rt unit.

b. Refer to figure 2–1 (transmit), connect the test equipment to the rt unit, and energize.

c. At the top of the rt unit, connect the Signal Generator AN/URM–127 output across the outside terminals of TRANSMIT AUDIO control 1R19, figure 2–2①. Adjust the AN/URM–127 for an output signal of 1000 Hz.

d. At rt unit, set FREQUENCY KILOCYCLES control at 2999 kHz and FUNCTION switch at CW. Key and adjust rt unit and AN/URM–127 for a 50 watt output indication on the front panel meter.

NOTE

The rt unit be below the alc threshold.

e. At filter assembly 1A19 (fig. 3–53) (rt unit keyed) adjust capacitors 1A19C41 and 1A19C45 to obtain a maximum indication on the ME–26A/U. Unkey the rt unit.

f. At rt unit, set FUNCTION switch at LSB.

g. At filter assembly 1A10 (rt unit keyed) adjust capacitors 1A19C45 and 1A19C48 to obtain a maximum indication on the ME–26(*)/U. Unkey the rt unit.

CHAPTER 3

DEPOT MAINTENANCE
RECEIVER-TRANSMITTER, RADIO RT–902/GRC–165

3–1. General

The troubleshooting, repair, and alignment procedures for the assemblies of the rt unit are outlined in this chapter. These procedures are prepared for use by Depot Maintenance Shops on those assemblies that have been removed from the rt unit for repair. After completion, the repaired assemblies are to be returned to stock or reinstalled in an rt unit, refer to chapter 2 for installation procedures. After installation in the rt unit, perform the depot test (chapter 6 depot overhaul standard) to verify satisfactory operation.

3–2. Test Equipment and Special Items Required For Maintenance

The test equipment required for the rt unit depot maintenance procedures is listed in *p* below. Additional items such as test loads and connectors must be fabricated. Fabrication details are covered in *a* through *o* below and in figure 3–1.

a. Fabricated Connector, RF No. 425–0675 (fig. 3–1A).

NOTE

Required for depot testing of rf amplifier 1A1 in conjunction with fabricated loads 425–0676 and 425–0677 (para *b* and *c* below).

(1) Obtain a five pin connector (RF Communications No. MP–1401) and 4 feet each of insulated white, red, black, green, and yellow number 22 gauge wire.

(2) Obtain a 1,000 ohm, ½ watt resistor for R1.

(3) Assemble the connector, wire, and R1 as shown in figure 3–1A.

b. Fabricated Load, RF No. 425–0676 (fig. 3–1B).

NOTE

Required for depot testing of rf amplifier 1A1 in conjunction with fabricated connector 425–0675 (para *a* above) and fabricated load 425–0677 (para *c* below).

(1) Obtain a 62 picofarad capacitor for C1, an 18,000 ohm, 1 watt resistor for R1, and two 2-inch pieces of buss wire.

(2) Assemble resistor R1, capacitor C1, and the buss wire as shown in figure 3–1B.

c. Fabricated Load, RF No. 425–0677 (fig. 3–1C).

NOTE

Required for depot testing of rf amplifier 1A1 in conjunction with fabricated connector 425–0675 (para *a* above) and fabricated load 425–0676 (para *b* above).

(1) Obtain a 12 picofarad capacitor for C1, a 390 microhenry inductor for L1 (RF No. L–0075), a 4,700 ohm, ½ watt resistor for R1, a coaxial connector (RF No. P–0032), a UG–675/U coaxial connector, and three inches of RG–178/U 52 ohm coaxial cable.

(2) Assemble the connectors, C1, L1, R1, and the coaxial cable as shown in figure 3–1C.

d. Fabricated Connector, RF No. 425–0678 (fig. 3–1D).

NOTE

Required for depot testing of limiter 1A14 and limiter 1A15.

(1) Obtain a five pin connector (RF Communications No. MP–1401) and 3 feet each of insulated white, red, black, green, and yellow number 22 gauge wire.

(2) Assemble the connector and wire as shown in figure 3–1D.

e. Fabricated Connector, RF No. 425–0679 (fig. 3–1E).

NOTE

Required for depot testing of af amplifier 1A16.

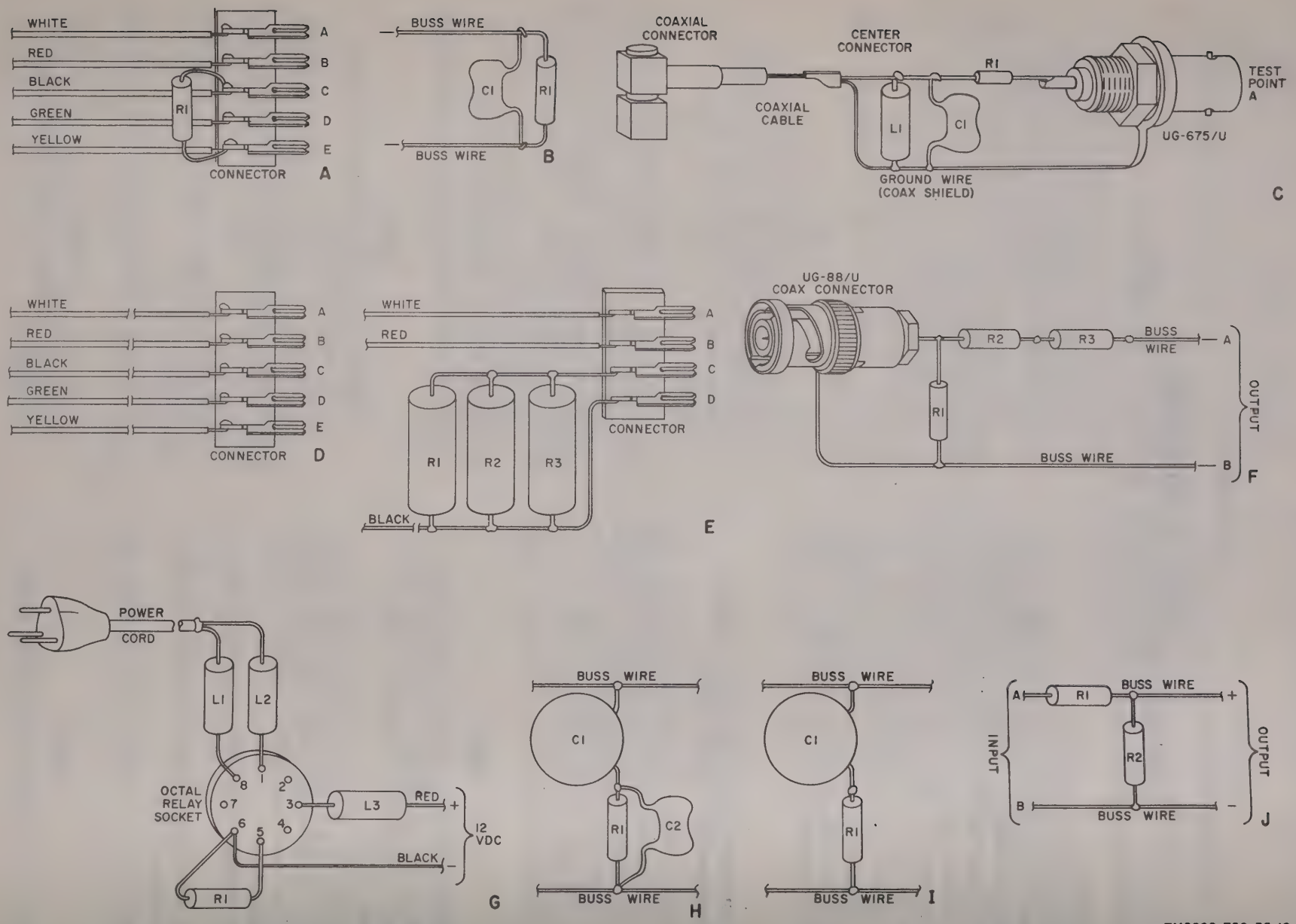


Figure 3–1. Test connectors, attenuators, and loads, fabrication diagram.

(1) Obtain a four pin connector (RF Communications No. MP–1400), three 10 ohm, 2 watt resistors for R1, R2, and R3, and 3 feet each of insulated white, red, and black number 22 gauge wire.

(2) Assemble the connector, resistors R1, R2, and R3, and the wire as shown in figure 3–1E.

f. Fabricated Attenuator, RF No. 425–0680 (fig. 3–1F).

NOTE

Required for depot testing of filter assembly 1A19 in conjunction with fabricated attenuator 425–0693 (para *o* below).

(1) Obtain a 62 ohm, ½ watt resistor for R1, a 680 ohm, ½ watt resistor for R2, a 51 ohm, ½ watt resistor for R3, a UG–88/U type BNC connector, and a 2-inch piece of buss wire.

(2) Assemble resistors R1, R2, R3, the connector, and the buss wire as shown in figure 3–1F.

g. Fabricated Connector, RF No. 425–0685 (fig. 3–1G).

NOTE

Required for depot testing of rf oscillator 1A17.

(1) Obtain three 240 microhenry chokes for L1, L2, and L3 (FMC 99800 No. 1537–94), a 1,000 ohm, ½ watt resistor for R1, an eight pin octal relay socket, a 115 Vac power cord (RF Communications No. W–1038), and 2 feet each of red and black number 22 gauge wire.

(2) Assemble chokes L1, L2, L3, the power cable, the socket, and the wire as shown in figure 3–1G.

h. Fabricated Attenuator, RF No. 425–0686 (fig. 3–1H).

NOTE

Required for depot testing of rf oscillator 1A10 in conjunction with fabricated attenuator 425–0687 (para *i* below).

(1) Obtain a 0.1 microfarad capacitor for C1, a 130 picofarad capacitor for C2, an 820 ohm, ½ watt resistor for R1, and two 2-inch pieces of buss wire.

(2) Assemble capacitors C1, C2, resistor R1, and the buss wire as shown in figure 3–1H.

i. Fabricated Attenuator, RF No. 425–0687 (fig. 3–1I).

NOTE

Required for depot testing of rf oscillator 1A10 in conjunction with fabricated attenuator 425–0686 (para *h* above).

(1) Obtain a 0.1 microfarad capacitor for C1, a 22 ohm, ½ watt resistor for R1, and two 2-inch pieces of buss wire.

(2) Assemble capacitor C1, resistor R1, and the buss wire as shown in figure 3–1I.

j. Fabricated Attenuator, RF No. 425–0688 (fig. 3–1H).

NOTE

Required for depot testing of rf oscillator 1A11 in conjunction with fabricated attenuator 425–0689 (para *k* below).

(1) Obtain a 0.1 microfarad capacitor for C1, a 130 picofarad capacitor for C2, a 1,000 ohm, ½ watt resistor for R1, and two 2-inch pieces of buss wire.

(2) Assemble capacitors C1, C2, resistor R1, and the buss wire as shown in figure 3–1H.

k. Fabricated Attenuator, RF No. 425–0689 (fig. 3–1H).

NOTE

Required for depot testing of rf oscillator 1A11 in conjunction with fabricated attenuator 425–0688 (para *j* above) and rf oscillator 1A12 in conjunction with fabricated attenuator 425–0690 (para *l* below).

(1) Obtain a 0.1 microfarad capacitor for C1, a 0.0047 microfarad capacitor for C2, a 2,200 ohm, ½ watt resistor for R1, and two 2-inch pieces of buss wire

(2) Assemble capacitors C1, C2, resistor R1, and the buss wire as shown in figure 3–1H.

l. Fabricated Attenuator, RF No. 425–0690 (fig. 3–1I).

NOTE

Required for depot testing of rf oscillator 1A12 in conjunction with fabricated attenuator 425–0689 (para *k* above).

(1) Obtain a 0.1 microfarad capacitor for C1,

a 1,800 ohm, ½ watt resistor for R1, and two 2-inch pieces of buss wire.

(2) Assemble capacitor C1, resistor R1, and the buss wire as shown in figure 3–1I.

m. Fabricated Attenuator, RF No. 425–0691 (fig. 3–1B).

NOTE

Required for depot testing of rf oscillator 1A13 in conjunction with fabricated attenuator 425–0692 (para *n* below).

(1) Obtain a 0.015 microfarad capacitor for C1, a 1,800 ohm, ½ watt resistor for R1, and two 2-inch pieces of buss wire.

(2) Assemble capacitor C1, resistor R1, and the buss wire as shown in figure 3–1B.

n. Fabricated Attenuator, RF No. 425–0692 (fig. 3–1I).

NOTE

Required for depot testing of rf oscillator 1A13 in conjunction with fabricated attenuator 425–0691 (para *m* above).

(1) Obtain a 0.1 microfarad capacitor for C1, a 33 ohm, 12 watt resistor for R1, and two 2-inch pieces of buss wire.

(2) Assemble capacitor C1, resistor R1, and the buss wire as shown in figure 3–1I.

o. Fabricated Attenuator, RF No. 425–0693 (fig. 3–1J).

NOTE

Required for depot testing of rf oscillator 1A17 in conjunction with fabricated attenuator 425–0680 (para *f* above).

(1) Obtain a 680 ohm, ½ watt resistor for R1, a 51 ohm, ½ watt resistor for R2, and two 2-inch pieces of buss wire.

(2) Assemble resistors R1, R2, and the buss wire as shown in figure 3–1J.

p. Test Equipment.

Equipment	Qty	Technical manual
Multimeter ME–26(*)/U[a]	1	TM 11–6625–200–15
Voltmeter, Electronic, ME–30(*)/U[b]	1	TM 11–6625–320–15
Voltmeter, Electronic, AN/URM–145	1	TM 11–6625–524–14
Generator, Signal AN/GRM–50	1	TM 11–6625–573–15
Generator, Signal AN/URM–127	1	TM 11–6625–683–15
Oscilloscope, AN/USM–281	1	TM 11–6625–1703–15
Counter, Electronic Digital Readout AN/USM–207.	1	TM 11–6625–700–10
Radio Test Set AN/GRM–90	1	
Wattmeter AN/URM–120 and Dummy Load Electrical DA–75/U.	1	TM 11–6625–446–15
Microphone M–143/GR	1	
Charger, Battery PP–1451/G	1	TM 11–6130–236–12
Supply, Power PP–3940/G	2	TM 11–6130–247–15
Probe, Scope, HP–11047A	1	
Probe, T–Connector, HP–11042A	1	
Power Supply HP–711A	1	
Power Supply HP–721A	1	
Power Supply HP–723A	1	
Detector, Crystal, HP–8471A	1	
Transmission Test Set AN/USM–306	1	TM 11–6625–1748–12

[a] Multimeter ME–26(*) /U includes ME–26A /U, ME–26B /U, ME–26C /U, and ME–26D /U.
[b] Voltmeter, Electronic ME–30(*) /U includes ME–30B /U, ME–30C /U, ME–30E /U, and Voltmeter, Meter ME–30A /U.

q. Additional Equipment.

(1) Cable W1 (CX–10822/U).
(2) Cable W7 (FSN 6150–617–1470).
(3) Cable W8 (HH Smith Co. No. 1537–36).
(4) Cable W9 (FSN 5995–968–3325).
(5) Adapter UG–1035/U.
(6) Adapter UG–201/U.
(7) Adapter UG–273/U.
(8) Connector UG–247A/U.
(9) Alignment Tool (Delevan No. 9668).
(10) Resistor, 390 ohms.
(11) Tool Kit TK–100/G (SC 5180–91–CL–S21).
(12) Tool Kit TK–105/G (SC 5180–91–CL–R07).

3–3. General Parts Replacement Techniques

Most of the components on the rt unit can be reached and replaced easily without special procedures, however, the following general precautions do apply.

a. Careless replacement of components can cause new faults. Note the following points:

(1) Before a component is unsoldered, note the position of the leads. If the component has numerous leads, tag (if possible) each lead before removing.

(2) Be careful not to damage other leads or components by pushing or pulling them out of the way.

(3) Do not allow drops of solder to fall into the rt unit.

(4) A carelessly soldered connection may

create a new fault. It is important to solder connections properly, because a poorly soldered connection is one of the most difficult faults to find.

b. Do not disturb the settings of variable coils, potentiometers, or capacitors unless specified.

c. Use a pencil-type soldering iron with a 25 watt maximum capacity. If only ac operated soldering irons are available, use an isolation transformer. Do not use a soldering gun; damaging voltages can be induced in components. Check soldering irons for shorts to the tip before using.

d. When soldering transistor leads, solder quickly. Where wiring permits, use a heat sink (such as long nose pliers) between the soldered connection and the transistor. Use approximately the same length and dress of transistor leads as used originally. The use of a heat sink is demonstrated in TM 11–4000.

3–4. Power Supply

To troubleshoot and repair the power supply circuitry in the rt unit, perform the following procedures.

WARNING

Voltages of up to 800 Vdc are present. Observe all safety precautions necessary to avoid contact.

CAUTION

Observe correct ME–26(*)/U polarity connections when making voltage measurements.

a. Perform the short circuit tests outlined in chapter 2 of this manual.

b. If no shorts are found, turn on the power to the rt unit and make the voltage checks outlined in TM 11–5820–759–12.

c. If an improper indication is obtained in step *b*, refer to the main frame schematic diagram (fig. 6–12 ①, ②) and isolate the faulty component.

3–5. Power Amplifier

To troubleshoot and repair the power amplifier (pa.) section of the rt unit, proceed as follows.

a. Refer to paragraph 2–11*a* and *b* and remove the top and bottom covers from the rt unit. Remove the top and bottom covers from the pa. section.

b. Inspect all components in the top and bottom pa. section for visible evidence of overheating or arcing.

c. At front panel of the rt unit, set 1000 kHz FREQUENCY KILOCYCLES control at position 2 and check that all tabs on wafer switch 1S6 are engaged with the rotors.

d. Refer to figure 2–1 (transmit) and connect the test equipment to the rt unit. Tune the rt unit to 2555 kHz in the cw mode and set TRANSMIT AUDIO control fully counterclockwise.

e. Refer to the following chart and make the voltage checks on the pins of 1V1, 1V2, 1V3. If voltages are not within ±15 percent of those listed, set FUNCTION switch at OFF and make the necessary resistance checks to isolate the faulty component. Repair or replace as necessary. Refer to figure 6–12 ①, ② for the circuit diagram of the pa. section.

Pin number	Voltage 1V1, 1V2, 1V3	Resistance 1V1, 1V2, 1V3	Remarks
1	3.4 Vdc	12 ohms	
2	6.3 Vac	less than 1 ohm	heater
3	205 Vdc	20K ohms	
4	3.4 Vdc	12 ohms	
5	−55 Vdc	40K ohms	Adjustable pa. bias.
6	3.4 Vdc	12 ohms	
7	0	0 ohms	ground
8	0	0 ohms	ground
Plate cup	780 Vdc	400K ohms	

NOTE

Dc voltage readings taken in cw transmit mode with TRANSMIT AUDIO control fully counterclockwise. Resistance readings are taken with an ME–26 (*)/U common lead connected to chassis ground.

f. With pa. bias adjust switch 1S7 depressed, key the rt unit and adjust 1A20R4 for a front panel meter indication of S9. Unkey the rt unit. If meter will not indicate S9, check 1V1, 1V2, and 1V3 for proper operation on a tube tester or substitute new tubes and repeat this step.

g. With pa. bias adjust switch 1S7 depressed, key the rt unit and adjust TRANSMIT AUDIO control for a front panel meter indication of +60

on the top scale, approximately 150 watts. Unkey the rt unit.

h. If the meter indication of +60 for step *g* above cannot be obtained, check rf amplifier 1A1 output at filter 1FL4 (fig. 6–12 ②) at grid of V1), terminal 1E69, for 35 ±10 percent mvac using an AN/URM–145 electronic voltmeter.

i. Repeat step *g* above and adjust PA TUNE control for a null indication (dip) on the front panel meter.

j. If the null of step *i* above occurs at the proper (2.5 MHz) position, then the pa. section is loading properly and the defect is probably in the output detector circuitry (transistor 1Q3 (fig. 6–12 ①) and associated circuitry) that has been by-passed by switch 1S7 during the preceding test.

k. If the null occurs at a higher frequency indication on the rt unit instead of the nominal 2.5 MHz position, then check for a shorted component in the output network on switch 1S6, section B, or in the output coaxial cable.

l. If a null cannot be obtained and the rf plate voltage at 1V1, 1V2, and 1V3 is less than 70 Vac check 1L6 for an open circuit, shorted 1C20, or shorted 1S6, section A, parts.

3–6. Receive/Transmit Relay Switching (fig. 3.2 and 6–12 ① and ②)

To troubleshoot and repair the receive/transmit relay switching circuitry proceed as follows:

WARNING

High voltages appear in some of the following tests. Use all safety precautions necessary to prevent contact.

a. Test Setup.

(1) Refer to paragraph 2–11*a* and *b* and remove the top and bottom covers from the rt unit.

(2) Refer to figure 3–2 and connect the test equipment.

NOTE

All dc voltage measurements are made using the ME–26(*)/U with the common lead connected to ground.

b. Relay 1A20K1 Standby and Operate Test.

(1) Set FUNCTION switch at OFF.

(2) Remove relay 1A20K1 from 1A20J41 and connect cable assembly CX–10826/GRM–90 to 1A20J41. Install relay 1A20K1 into one of the

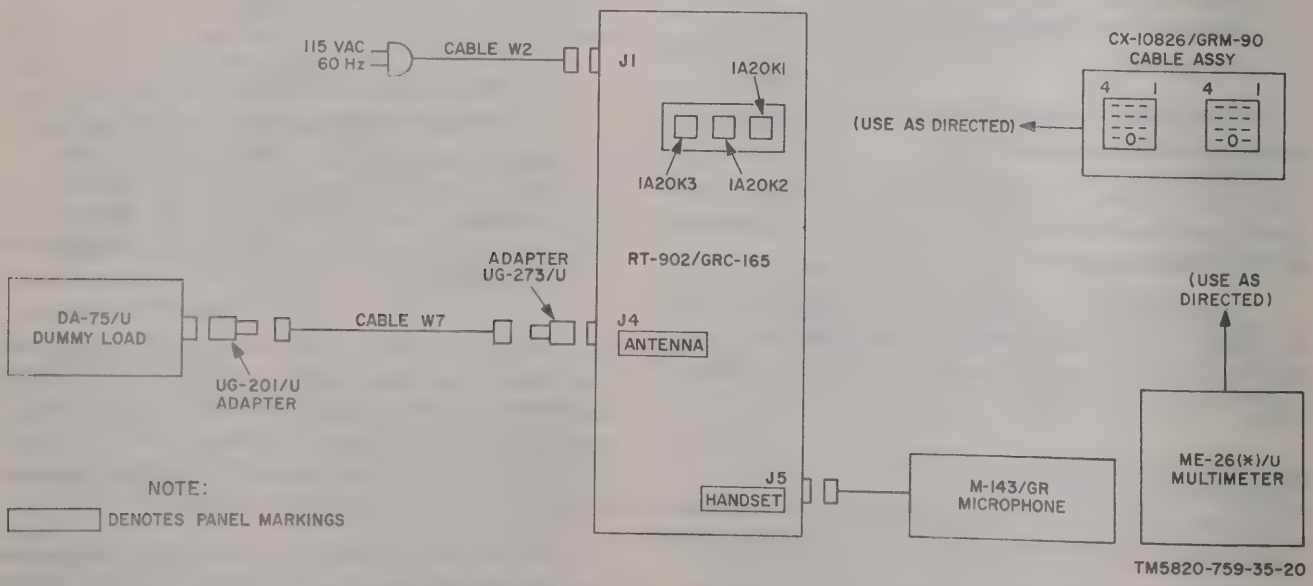


Figure 3–2. Receive/transmit relay switching test setup.

sockets on the CX–10826/GRM–90 cable assembly.

(3) At rt unit, set FUNCTION switch at STBY and measure the circuit voltages at the pins of the unused relay socket. Compare the readings to the nominal values listed below.

Relay pin number	Volts
1	+225 Vdc
2	not used
3	+12 Vdc
4	not used
5	0 Vdc
6	not used
7	0 Vdc
8	not used
9	+225 Vdc
10	not used
11	+12 Vdc
12	not used
13/14	do not measure

NOTE

If the voltages measured are not proper, refer to figure 6–12①,② and check the power supply circuitry and associated relay wiring.

(4) At the rt unit, set FUNCTION switch at AM. Remeasure the circuit voltages and compare these readings to the nominal values listed below.

NOTE

Measure the ac voltage across terminals 13 and 14.

Relay pin number	Volts
1	0 Vdc
2	not used
3	0 Vdc
4	not used
5	+225 Vdc
6	not used
7	+12 Vdc
8	not used
9	+225 Vdc
10	not used
11	+12 Vdc
12	not used
13/14	115 Vac

(5) If the ac voltage across pins 13 and 14 is absent, refer to figure 6–12 ①, ② and check FUNCTION switch 1S2–B. If the dc voltages of step (3) above check properly but those of step (4) above do not, then replace relay 1A20K1 and recheck step (4) above.

(6) Set FUNCTION switch at OFF.

(7) Disconnect cable assembly CX–10826/GRM–90 from 1A20J41 and reconnect relay 1A20K1 to 1A20J41.

c. Relay 1A20K2 Receive/Transmit Test.

(1) Set FUNCTION switch at OFF.

(2) Remove relay 1A20K2 from 1A20J37 and connect cable assembly CX–10826/GRM–90 to 1A20J37. Install relay 1A20K2 into one of the sockets on the CX–10826/GRM–90 cable assembly.

(3) At rt unit, set FUNCTION switch at AM and measure the circuit voltages at the pins of the unused relay socket. Compare the readings to the nominal values listed below.

Relay pin number	Volts
1	variable (received signal agc voltage)
2	+14 Vdc
3	+14 Vdc
4	0 Vdc (ground)
5	0 Vdc
6	0 Vdc (ground)
7	0 Vdc (ground)
8	+12 Vdc
9	variable (received signal agc voltage)
10	+14 Vdc
11	+12 Vdc
12	0 Vdc (ground)
13	+14 Vdc
14	+14 Vdc

NOTE

If the voltages measured are not proper, refer to figure 6–12①,② and check the associated circuitry.

(4) With the rt unit keyed, remeasure the circuit voltages and compare these readings to the nominal values listed below. Unkey the rt unit.

Relay pin number	Volts
1	not significant
2	+14 Vdc
3	+12 Vdc
4	0 Vdc (ground)
5	variable (rf output detector meter voltage)
6	0 Vdc (ground)
7	0 Vdc (ground)
8	+12 Vdc
9	variable (rf output detector meter voltage)
10	0 Vdc (ground)
11	0 Vdc (ground)
12	+12 Vdc
13	+12 Vdc
14	0 Vdc

(5) If the dc voltages of step (3) above check properly but those of step (4) above do not, then replace relay 1A20K2 and recheck step (4) above.

(6) Set FUNCTION switch at OFF.

(7) Disconnect cable assembly CX–10826/GRM–90 from 1A20J37 and reconnect relay 1A20K2 to 1A20J37.

d. Relay 1A20K3 Receive/Transmit Test.

(1) Set FUNCTION switch at OFF.

(2) Remove relay 1A20K3 from 1A20J39 and connect cable assembly CX–10826/GRM–90 to 1A20J39. Install relay 1A20K3 into one of the sockets on the CX–10826/GRM–90 cable assembly.

(3) At rt unit, set FUNCTION switch at AM and measure the circuit voltages at the pins of the unused relay socket. Compare these readings to the nominal values listed below.

Relay pin number	Volts
1	+12 Vdc
2	0 Vdc (ground)
3	not used
4	variable (received signal agc voltage)
5	0 Vdc (ground)
6	+12 Vdc
7	not used
8	not used
9	+12 Vdc
10	0 Vdc (ground)
11	not used
12	not used
13	+14 Vdc
14	+14 Vdc

NOTE

If the voltages measured are not proper, refer to figure 6–12①,② and check associated circuitry.

(4) With the rt unit keyed, remeasure the circuit voltages and compare these readings to the nominal values listed below. Unkey the rt unit.

Relay pin number	Volts
1	+12 Vdc
2	0 Vdc (ground)
3	not used
4	not significant for transmit mode
5	0 Vdc (ground)
6	+12 Vdc
7	not used
8	not used
9	0 Vdc
10	+12 Vdc
11	not used
12	not used
13	0 Vdc
14	+14 Vdc

(5) If the dc voltages of step (3) above check properly but those of step (4) above do not, then replace relay 1A20K3 and recheck step (4) above.

(6) Set FUNCTION switch at OFF.

(7) Disconnect cable assembly CX–10826/GRM–90 from 1A20J39 and reconnect relay 1A20K3 to 1A20J39.

3–7. Rf Amplifier 1A1

The troubleshooting, repair, and alignment procedures necessary for rf amplifier 1A1 are outlined in the following paragraphs. Perform the troubleshooting procedures in *a* below to isolate the faulty component or subassembly. After the faulty component or subassembly has been isolated, refer to the disassembly procedure in *b* below, for part replacement instructions. Perform the reassembly and alignment procedures in *c* and *d* below, after replacing the faulty part.

a. Troubleshooting. To troubleshoot rf amplifier 1A1, perform the following procedures:

(1) Connect all test equipment as shown in figure 3–3. Turn power on and adjust each power supply for the proper voltage. Turn off all power supplies.

(2) At rf amplifier 1A1, rotate preselector shaft fully counterclockwise. Set band switch at 2 MHz position (fig. 3–5).

(3) At subassembly 1A1A6, figure 3–4, connect dc probe of ME–26(*)/U to the junction of resistor 1A1A6R3 and capacitor 1A1A6C42 (fig. 3–6②).

(4) Energize power supplies A and B only.

(5) Voltage indication on ME–26(*)/U should be +0.2 ±0.02 Vdc.

(6) Set switches on ME–26(*)/U to read voltage required in (7) below. Turn on power supply C.

(7) Voltage indication on ME–26(*)/U should now be —27 ±1 Vdc. Turn off all power supplies.

(8) If proper indications were not obtained in steps (5) and (6) above, refer to table 3–1, figure 3–6②, and 6–13 and perform voltage and resistance measurements on subassembly 1A1A6.

(9) Connect output of AN/GRM–50 to test point A on fabricated load C (fig. 3–1). Set AN/

GRM-50 controls to produce a 2 MHz cw output signal at 50 mvac.

(10) At subassembly 1A1A5, connect the ac probe of ME-26(*)/U to terminal 1A1A5E147 and common lead to terminal 1A1A5E124 (fig. 3-4, and fig. 3-6②).

Table 3-1. RF Amplifier 1A1 DC Voltages

Pin	V1	V2	Q1
1/E	0.20 v	2.3 v	1.8 v
2/B	3.1 v	0.13v	1.2 v
3/C	0.0 v	0.0 v	0.20 v
4	0.0 v	0.0 v	
5	195 v	0.0 v	
6	154 v	0.0 v	
7	3.1 v	195 v	
8		195 v	
9		0.0 v	

NOTE

All voltage readings in table above were taken with ME-26(*)/U.

(11) Turn on power supplies A, B, and C. Using the preselector shaft, peak the output indication on ME-26(*)/U with AN/GRM-50 set at the following frequencies and output level. The indication observed on the ME-26(*)/U should be within the limits listed.

Frequency	*Output*
2.0 MHz at 50 mv	15 ±10 Vac
2.2 HHz at 50 mv	16 ±6 Vac
3.0 MHz at 50 mv	8 ±2 Vac

If the proper indications are not obtained, refer to figures 3-6 and 6-13 and troubleshoot the circuitry for the frequency producing the improper output voltage.

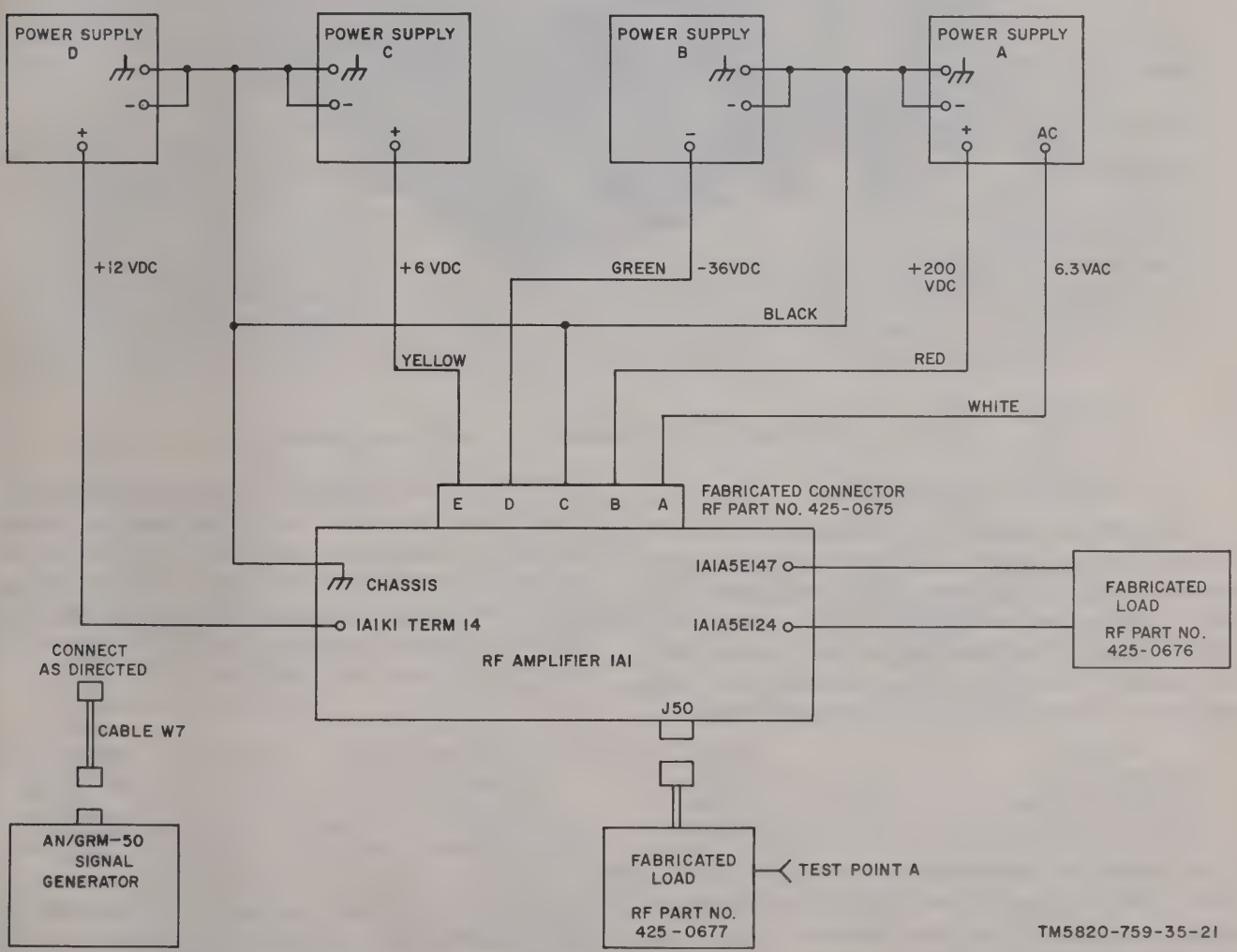


Figure 3-3. Rf amplifier 1A1 test setup.

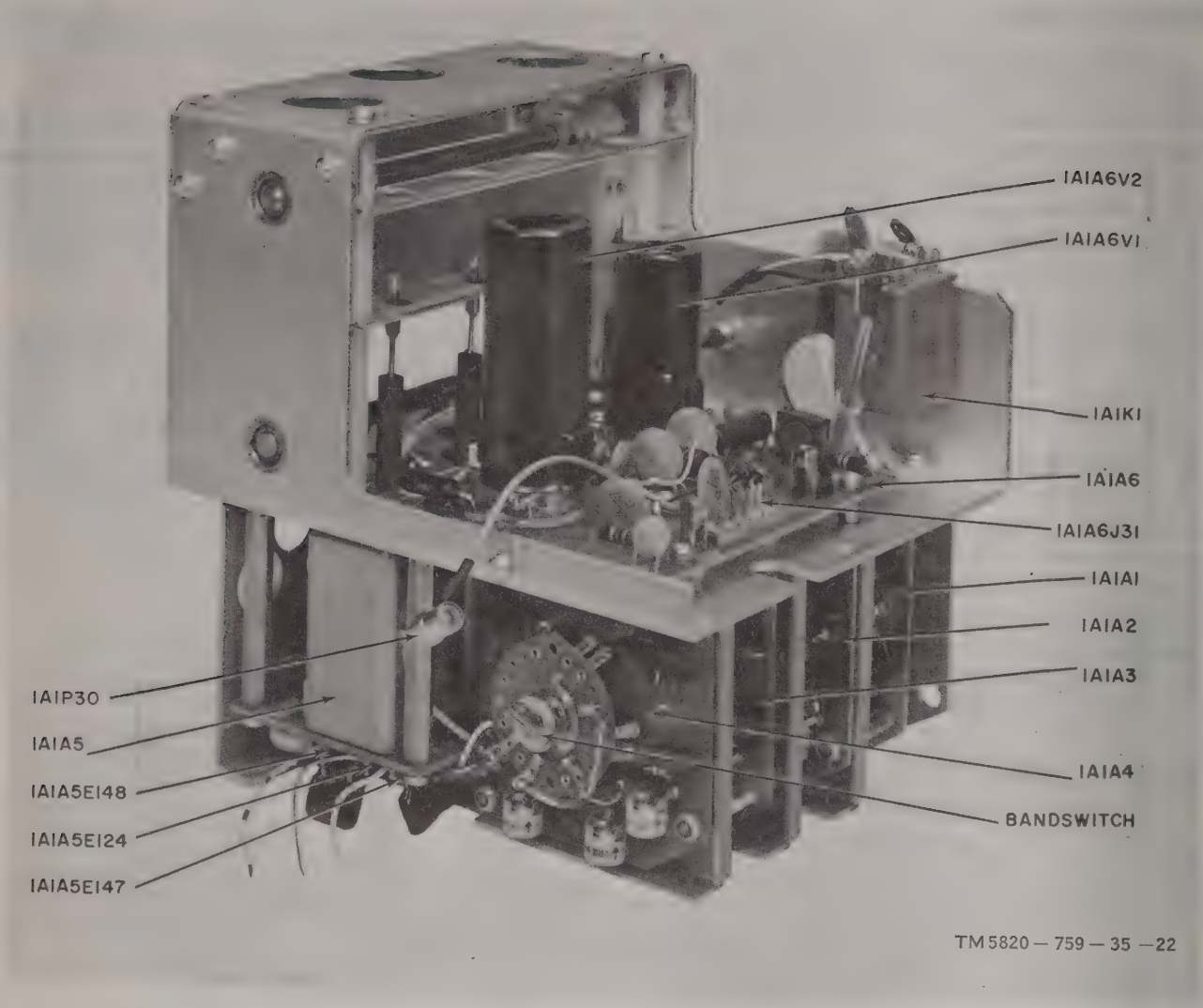


Figure 3–4. Rf amplifier 1A1 subassembly and component locations.

(12) Turn off power supply A.

(13) At rf amplifier 1A1, set band switch at 4 MHz position, figure 3–5, and energize power supply A. Using the preselector shaft, peak the output indication on ME–26(*)/U with AN/GRM–50 set at the following frequencies and output level. The indication observed on the ME–26(*)/U should be within the limits listed.

Frequency	*Output*
3.0 MHz at 50 mv	38 ±12 Vac
4.5 MHz at 50 mv	13 ±7 Vac
5.0 MHz at 50 mv	13 ±5 Vac

If the proper indications are not obtained, refer to figure 3–6①,② and figure 6–13 and troubleshoot the circuitry for the frequency producing the improper output voltage.

(14) Turn off power supply A.

(15) At rf amplifier 1A1, set band switch at 7 MHz position, (fig. 3–5), and energize power supply A. Using preselector shaft, peak the output indication on ME–26(*)/U with AN/GRM–50 set at the following frequencies and output level. The output indication observed on the ME–26(*)/U should be within the limits listed.

Frequency	*Output*
5.0 MHz at 50 mv	32 ±7 Vac
5.5 MHz at 50 mv	30 ±6 Vac
8.2 MHz at 50 mv	20 ±6 Vac
9.0 MHz at 50 mv	15 ±6 Vac

If the proper indications are not obtained, refer to figures 3–6①, ② and 6–13 and troubleshoot the circuitry for the frequency producing the improper output voltage.

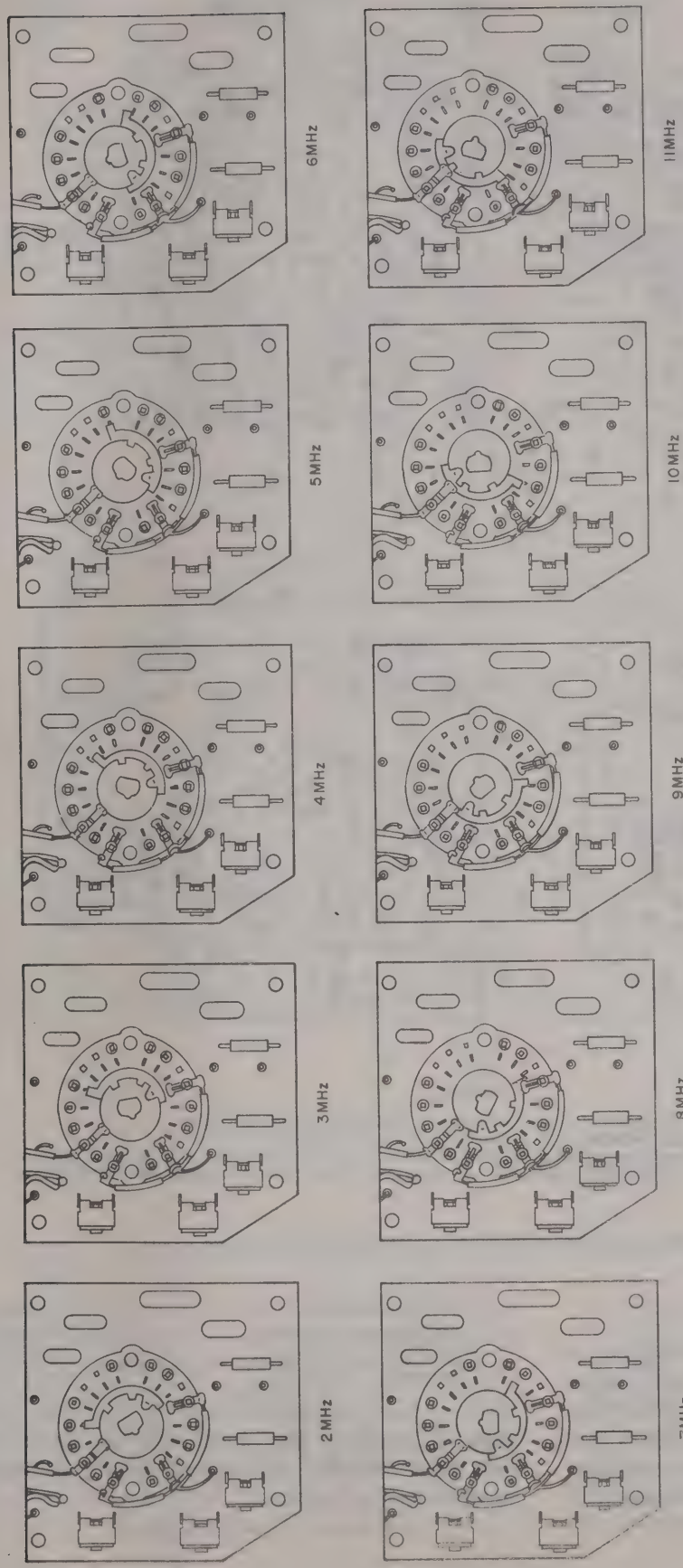


Figure 3-5. Rf amplifier 1A1 band switch 1A1S1.

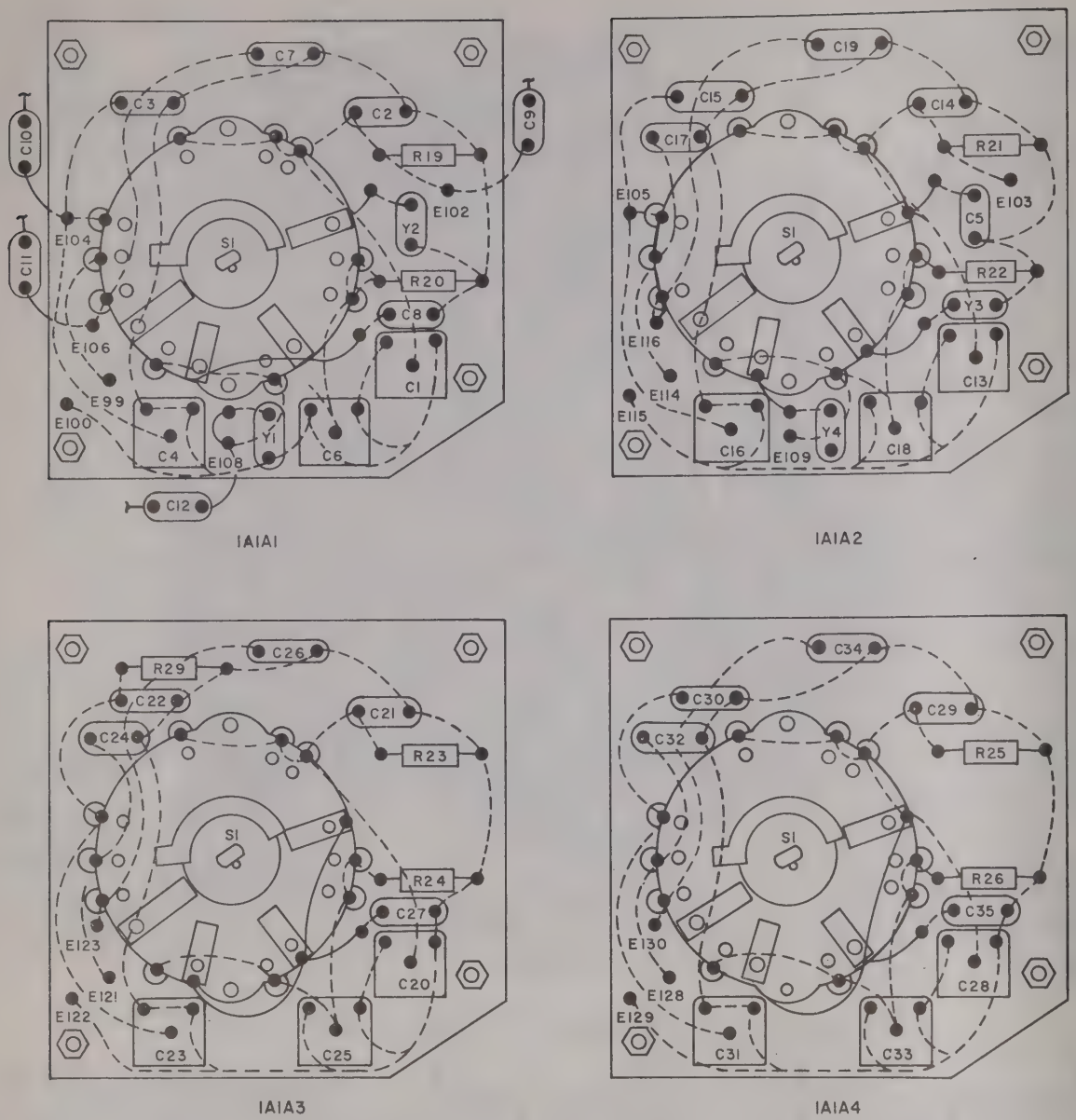


Figure 3–6①. Subassemblies 1A1A1 through 1A1A6 component locations.

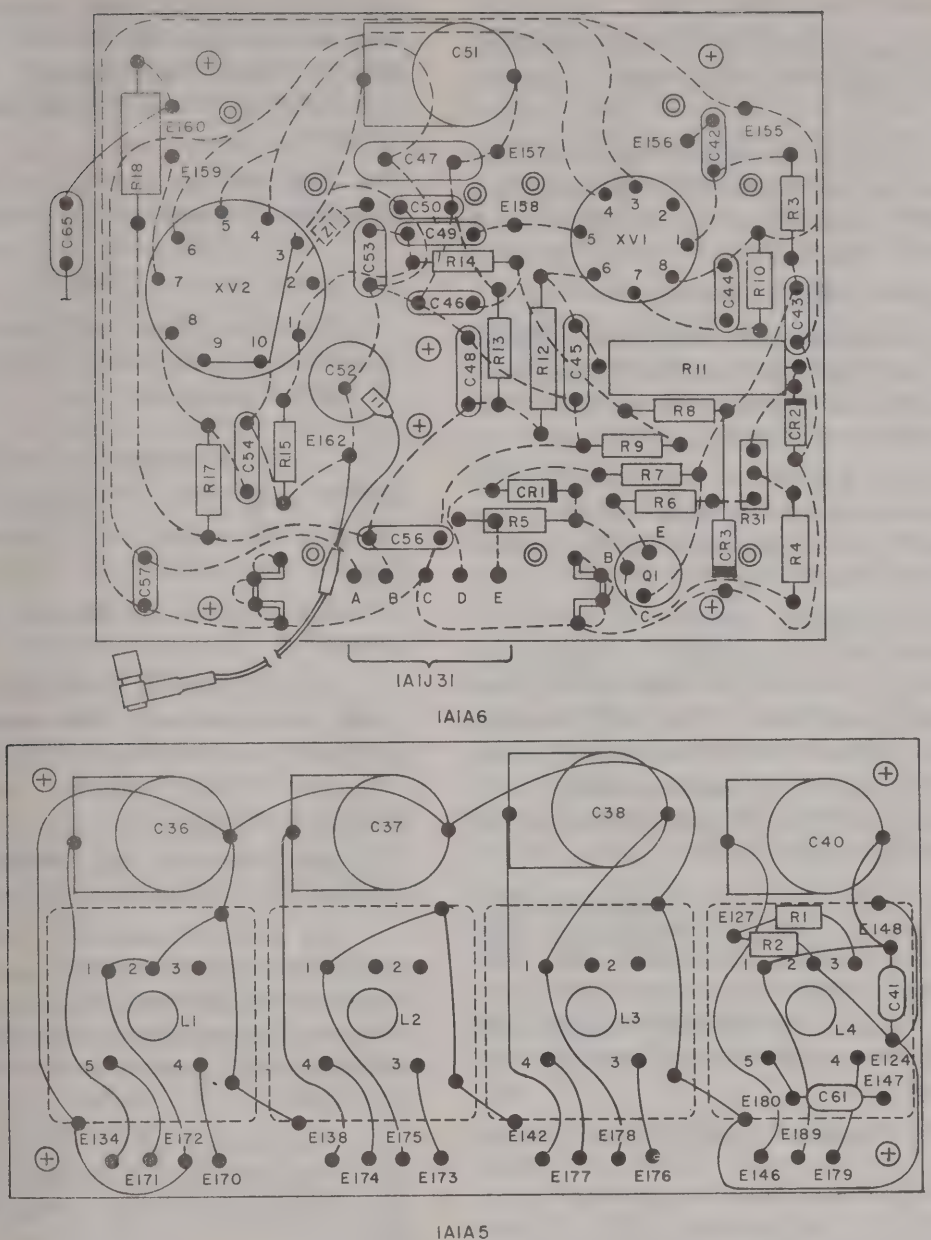
(16) Turn off power supply A.

(17) At rf amplifier 1A1, set band switch at 12 MHz position (fig. 3–5), and energize power supply A. Using preselector shaft, peak the output indication on ME–26(*)/U with AN/GRM–50 set at the following frequencies and output level. The output indication observed on the ME–26(*)/U should be within the limits listed:

Frequency	*Output*
9.0 MHz at 50 mvac	28 ±14 Vac
12.0 MHz at 50 mvac	24 ±9 Vac
15.0 MHz at 50 mvac	17 ±9 Vac

If the proper indications are not obtained, refer to figures 3–6①,② and 6–13 and troubleshoot the circuitry for the frequency producing the improper output voltage.

(18) Turn off power supply A.



NOTES:

1. CIRCUIT VIEWS FROM COMPONENT SIDE, EXCEPT FOR 1A1A5.
2. ——— DENOTES PARTS ON COMPONENT SIDE OF BOARDS; EXCEPT FOR 1A1A5.
3. — — — DENOTES OPPOSITE SIDE PRINTED CIRCUIT WIRING; EXCEPT FOR 1A1A5.
4. UNLESS OTHERWISE INDICATED, PREFIX ALL REFERENCE DESIGNATORS WITH 1A1.

TM5820-759-35-24(2)

Figure 3–6(2). Subassemblies 1A1A1 throught 1A1A6 component locations.

(19) At rf amplifier 1A1, set band switch at 13 MHz position (fig. 3–5), and set preselector shaft at approximately two-thirds of full clockwise rotation. Turn on power supply A.

(20) At AN/GRM–50, very slowly rotate frequency control through 12.741 MHz and observe a dip on the ME–26(*)/U. If dip is not observed, check crystal 1A1A2Y4 (fig. 3–6(1)).

(21) Turn off power supply A.

(22) At rf amplifier 1A1, set band switch at 11 MHz position (fig. 3–5), and set preselector shaft at mid-range. Energize power supply A.

(23) At AN/GRM–50, very slowly rotate frequency control through 12.494 MHz and observe a dip on the ME–26(*)/U. If dip is not observed, check crystal 1A1A2Y3 (fig. 3–6).

(24) Turn off power supply A.

(25) At rf amplifier 1A1, set band switch at 9 MHz position (fig. 3–5), and turn on power supply A.

(26) At AN/GRM–50, very slowly rotate frequency control through 8.247 MHz and observe a dip on ME–26(*)/U. If dip is not observed, check crystal 1A1A1Y1 (fig. 3–6①).

(27) Turn off power supply A.

(28) At rf amplifier 1A1, set band switch at 8 MHz position (fig. 3–5), and set preselector shaft at approximately two-thirds of full clockwise rotation. Turn on power supply A.

(29) At AN/GRM–50, very slowly rotate frequency control through 9.247 MHz and observe a dip on ME–26(*)/U. If dip is not observed, check crystal 1A1A1Y2 (fig. 3–6①).

(30) Turn off power supplies A, B, and C. Set rf amplifier 1A1 band switch at 5 MHz position (fig. 3–5). Connect AN/URM–145 to test point A on fabricated load C (fig. 3–1). Connect output of AN/GRM–50 to terminal 8 of relay 1A1K1 (fig. 3–7). Turn on power supplies A, B, and D. Set AN/GRM–50 controls to produce a 5.5 MHz, cw output signal at 15 mv.

(31) At rf amplifier 1A1, adjust preselector shaft to obtain a peak indication on AN/URM–145. The output indicated on AN/URM–145 should be 340 ±60 mvac. If proper indication is not obtained, check tubes 1A1A6V1 and 1A1A6V2. Refer to table 3–1 and measure voltages and resistances.

(32) Turn on power supply C and observe that the AN/URM–145 indication decreases at least 40 db from level in step (31) above. If improper indication is obtained, refer to table 3–1 and perform voltage and resistance checks on agc circuitry.

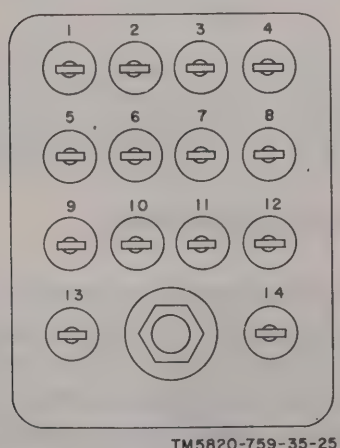


Figure 3–7. Relay 1A1K1 pin locations.

b. Disassembly (fig. 6–11① and ②). To disassemble rf amplifier 1A1, proceed as follows.

NOTE

Refer to legends of figures 6–11① and 6–11② to find on which illustration a part is shown.

(1) At subassembly 1A1A6 (9), unsolder coaxial wires from terminals E155 through E160.

(2) At 1A1A6 XV1 socket (7), unsolder ground wire (black).

(3) At terminal lug (8), unsolder the two wires.

(4) At amplifier subassembly 1A1A6 (9), remove four screws (2), four lockwashers (3), four flatwashers (4), screw (5), nonmetallic washer (6), and remove amplifier subassembly 1A1A6 (9) from chassis (1).

(5) At chassis (1), remove nut (10), lockwasher (11), screw (12), and terminal lug (8).

(6) At relay 1A1K1 (17), unsolder capacitor (16), coil (18), diode (21), and capacitor (24). Tag and unsolder the four coaxial wires and the two buss ground wires. Unsolder wire from terminal lug (22) and remove nut (23) and terminal lug (22).

(7) At relay 1A1K1 (17) mounting stud, remove nut (25), lockwasher (26), terminal lug (27), and remove relay 1A1K1 (17) from chassis (1).

(8) At terminal (14), unsolder capacitor (13) and coil (18).

(9) At terminal lug (15), unsolder capacitors (13, 16) and two buss wires.

(10) At terminal (14), remove screw (19), lockwasher (20), terminal lug (15), and terminal (14) from chassis (1).

(11) At connector (30) 1A1J46, remove nut (28), lockwasher (29), and connector (30) from chassis (1).

(12) At cover (35), remove six screws (31), six lockwashers (32), two screws (33), two lockwashers (34), and remove cover (35) from chassis (1).

(13) Rotate shaft (36) fully counterclockwise and remove screws (37, 43), spring clips (38, 44), nuts (39, 45), lockwashers (40, 46), screws (41, 47) and flat belts (42, 48).

(14) At shaft (51), loosen the two setscrews (49) in each of the two sleeve bearings (50) and remove shaft (51), two sleeve bearings (50), and four spring washers (52) from chassis (1).

(15) At shaft (36), loosen the two setscrews (53) and remove rigid shaft coupling (54).

(16) At shaft (36), loosen the two setscrews (55) in each of the sleeve bearings (56) and remove shaft (36), two sleeve bearings (56), and four spring washers (57) from chassis (1).

(17) At top of chassis (1), slide bracket (58) off sleeve spacers (59) and remove four tuning cores (60) from bracket (58).

(18) At top of chassis (1), remove screws (61, 62, 68), lockwashers (63, 69), flatwasher (64), and loop clamp (65) from chassis (1).

(19) At bracket (72), remove screws (70), lockwashers (71), and remove bracket (72) from chassis (1).

(20) At shaft (73), loosen the two setscrews (74) in each of the two rigid shaft couplings (75) and remove rigid shaft couplings (75) from shaft (75). Remove shaft (75).

(21) At bottom of amplifier subassembly 1A1A5 (76), unsolder the three bracket-mounted terminal lugs (77) from amplifier subassembly 1A1A5 (76) and unsolder wires from amplifier subassembly 1A1A5 terminals E134, E138, E146, E148, and E170 through E181.

(22) Remove two screws (78) and two lockwashers (79) and remove bracket (80), with amplifier subassemblies 1A1A1 (81) and 1A1A2 (82) attached, from chassis (1).

(23) Remove two screws (83) and two lockwashers (84) and remove bracket (85) from chassis (1).

(24) Remove two screws (87) and two lockwashers (88) and remove bracket (89), with amplifier subassemblies 1A1A3 (89) and 1A1A4 (90) attached, from chassis (1).

(25) At amplifier subassembly 1A1A2 (82), unsolder capacitor leads from terminals E103, E107, E108, and E109. Remove four nuts (91) and remove amplifier subassembly 1A1A2 (82) from sleeve spacer (92).

(26) At amplifier subassembly 1A1A1 (81), remove four screws (93) and remove amplifier subassembly 1A1A1 (81).

(27) At amplifier subassembly 1A1A4 (90), remove four nuts (94) and remove amplifier 1A1A4 (90) from sleeve spacers (95).

(28) At amplifier subassembly 1A1A3 (89), remove four screws (96) and remove amplifier subassembly 1A1A3.

(29) At brackets (80, 88), remove sleeve spacers (92, 95, 97, 98) and lockwashers (99, 100).

(30) At top of chassis (1), remove two screws (101) and two lockwashers (102) and remove amplifier subassembly 1A1A5 (76) from chassis (1).

(31) At bottom of amplifier subassembly 1A1A5 (76), remove nuts (103, 105), lockwashers (104, 106) and remove cans (107).

(32) At bottom of amplifier subassembly 1A1A5 (76), unsolder and remove transformers (108, 109, 110, 111) from amplifier subassembly 1A1A5 (76). Remove screws (112), lockwashers (113) and sleeve spacers (114).

(33) At bottom of chassis (1), remove nuts (112), lockwashers (113), sleeve spacers (114), screws (115), and sleeve spacers (59).

c. Reassembly (fig. 6–11①,②). To reassemble rf amplifier 1A1, proceed as follows:

(1) At chassis (1), install sleeve spacers (59) and secure with screws (118). Install sleeve spacers (117) and secure with lockwashers (116) and nuts (115).

(2) At amplifier subassembly 1A1A5 (76), install and solder transformers (108, 109, 110, 111). Install and secure cans (107) over transformers (108, 109, 110, 111) with lockwashers (104, 106) and nuts (103, 105). Secure sleeve spacers (114) using screws (112) and lockwashers (113).

(3) Position amplifier subassembly 1A1A5 (76) on chassis (1), guide coaxial wire through hole in chassis adjacent to transformer 1A1A5L4 (111) and secure amplifier subassembly 1A1A5 (76) to chassis (1) using screws (101) and lockwashers (102).

(4) Install sleeve spacers (95, 98) and lockwashers (100) on bracket (88). Secure amplifier subassembly 1A1A3 (89) to sleeve spacers (95) using screws (96). Secure amplifier subassembly 1A1A4 (90) to sleeve spacers (95) using nuts (94). Position switch rotors on amplifier subas-

sembly 1A1A3 (89) and amplifier subassembly 1A1A4 (90) so that notch in hole for shaft (73) is pointing away from amplifier subassembly 1A1A5 (76). Position bracket (88) on chasiss (1) guiding the two coaxial wires through the holes in chassis (1) and secure bracket (88) to chassis (1) using screws (86) and lockwashers (87).

(5) Install bracket (85) on chassis (1) using screws (83) and lockwashers (84).

(6) Install sleeve spacers (92, 97) and lockwashers (99) on bracket (80). Position amplifier subassembly 1A1A1 (81) on sleeve spacers (97) guiding the four capacitor leads through the holes in bracket (80). Secure amplifier subassembly 1A1A1 (81) to sleeve spacers (97) using screws (93).

(7) Position amplifier subassembly 1A1A2 (82) on sleeve spacers (92), guiding the four capacitor leads through the holes in amplifier subassembly 1A1A2 (82) and secure amplifier subassembly 1A1A2 (82) to sleeve spacers (92) using nuts (91). Solder the capacitor leads to the adjacent terminals, 1A1A2E103, 1A1A2E107, 1A1A2E108, and 1A1A2E109. Position switch rotors on amplifier subassemblies 1A1A1 (81) and 1A1A2 (82) so that notch in hole for shaft (73) is pointing away from amplifier subassembly 1A1A5 (76). Position bracket (80) on chassis (1), guiding the two coaxial wires through the holes in chassis (1) and secure bracket (80) to chassis (1) using screws (78) and lockwashers (79).

(8) Solder bracket-mounted terminal lugs (77) to the adjacent ground terminals on amplifier subassembly 1A1A5 (76). Solder the four wires from each amplifier subassembly 1A1A1 through 1A1A4 (81, 82, 89, 90) to amplifier subassembly 1A1A5 terminals E134, E138, E146, E148, and E170 through E181.

(9) Insert shaft (73) into switch rotors on amplifier subassemblies 1A1A1 through 1A1A4 (81, 82, 89, 90). Place rigid shaft coupling (75) on end of shaft (73) adjacent to amplifier subassembly 1A1A4 (90) so that bar is positioned perpendicular to chassis (1) and tighten setscrews (74). One setscrew must be on flat portion of shaft (73). Place rigid shaft coupling (75) on end of shaft (73) adjacent to amplifier subassembly 1A1A1 (81) so that bar is approximately parallel with chassis (1) and tighten setscrews (74). One setscrew must be on flat portion of shaft (73).

(10) Secure bracket (72) to bottom of chassis (1) using screws (68) and lockwasher (69). Secure bracket (72) to brackets (80, 85, 88) using screws (70) and lockwashers (71).

(11) At top of chassis (1), bend down terminal lugs, mounted on cans (107), against chassis (1). Slide loop clamp (65) over coaxial wire from amplifier subassembly 1A1A5 (76). Using screw (62), lockwasher (63), and flatwasher (64), secure loop clamp (65) and terminal lug mounted on transformer 1A1A5L2 (109) can (107) to chassis (1). Secure the three remaining terminal lugs to chassis (1) using screws (61, 66) and lockwashers (63, 67). Route coaxial wire from loop clamp (65) between chassis (1) and sleeve spacer (59) to area of relay 1A1K1 (17).

(12) At top of chassis (1), slide shaft (36) into lower bearing (with pin pointing towards bottom of chassis) and slide spring washers (52) and sleeve bearings (56) onto shaft (36). Slide shaft (36) into lower bearing at other side of chassis (1).

(13) At top of chassis (1), slide shaft (51) into upper bearing and slide spring washers (52) and sleeve bearings (50) onto shaft (51). Slide shaft (51) into upper bearing at other side of chassis (1).

(14) At bracket (58), loosely fasten flat belts (42, 48) to bracket (58) using screws (41, 47), lockwashers (40, 46), and nuts (39, 45). Slide bracket (58) onto sleeve spacers (59).

(15) At shaft (36), place rigid shaft coupling (54) on shaft (36) and tighten setscrews (53). Slide sleeve bearings (56) against spring washers (57) at either end of shaft (36). Bend flat belts (42, 48) around sleeve bearings (56). Align hole in flat belts (42, 48) with hole in sleeve bearings (56) and loosely fasten flat belts (42, 48) to sleeve bearings (56) using screws (37, 43). Rotate shaft (36) fully clockwise.

(16) At shaft (51), slide sleeve bearings (50) against spring washers (52) and tighten setscrews (49). Make sure that shaft (51) does not extend beyond sides of chassis (1). Bend flat belts (42, 48) around sleeve bearings (50) and connect ends of flat belts (42, 48) with spring clips (38, 44).

(17) Move bracket (58) to upper limit of travel. Adjust shaft (36) so that the distance from the back edge of rigid shaft coupling (54) to side of chassis (1) is 19/32-inch. Maintaining this

distance, slide sleeve bearings (56) against spring washers (57) and tighten setscrews (55). Install tuning cores (60), through bottom of amplifier subassembly (76), in bracket (58). Rotate shaft (36) to insure that bracket (58) and flat belts (42, 48) move freely without any binding.

(18) Secure connector (30) to chassis (1) using lockwasher (29) and nut (28).

(19) Secure terminal (14) and terminal lug (15) to chassis (1) using screw (19) and lockwasher (20).

(20) Secure relay 1A1K1 (17) and terminal lug (27) to chassis (1) using nut (25) and lockwasher (26).

(21) At relay 1A1K1 (17), secure terminal lug (22) using nut (23). Solder four coaxial wires and the two buss ground wires, diode (21), capacitors (16, 24), and coil (18).

(22) At terminal (14), solder coil (18) and capacitor (13).

(23) At terminal lug (15), solder two buss wires and capacitors (13, 16).

(24) Place amplifier subassembly 1A1A6 (9) on sleeve spacers (117) and secure using screws (2, 5), lockwashers (3), flatwashers (4), and nonmetallic washer (6). At base of 1A1A6XV1 socket, solder ground wire (black).

(25) At terminal lug (8), solder two wires.

(26) At top of chassis (1), secure cover (35) using screws (31, 33) and lockwashers (32, 34).

d. Alignment.

WARNING

Voltages of +200 Vdc are present. Observe safety precautions.

CAUTION

Observe correct power supply polarity connections.

NOTE

For a moderately repaired assembly, begin alignment with adjustments set at old positions. For an extensively repaired assembly, set all adjustments at mid-range.

(1) Connect all test equipment and fabricated loads as shown in figure 3–3. Energize and adjust power supplies for the proper voltages. Set all power supplies at either off or standby.

(2) Connect HP–8471A crystal detector and test equipment to terminals 1 and 4 of 1A1A5L3 (fig. 3–6②), and connect dc probe of ME–26(*)/U as shown in figure 3–8.

(3) Connect output of AN/GRM–50, using cable W8, to 1A1A6P30 at 1A1A6C52 (fig. 3–6②). Adjust AN/GRM–50 controls for 8 MHz cw output signal at 3 Vac.

(4) Energize only the 6.3 Vac output of power supply A.

(5) Adjust preselector shaft to obtain a peak indication on the ME–26(*)/U. Adjust capacitor 1A1A6C51 (fig. 3–6), for a null on the detector output voltage. Disconnect the crystal detector and associated test equipment.

(6) Energize power supplies A and B only. At amplifier subassembly 1A1A6, connect dc probe of ME–26(*)/U to junction of resistor 1A1A6R3 and capacitor 1A1A6C42 (fig. 3–6②). Adjust resistor 1A1A6R31 to obtain a +0.2 Vdc indication. Set power supply C at on and observe that the voltage is —27 ±1 Vdc. Set all power supplies at standby.

(7) Set band switch at 2 MHz position (fig. 3–5). Connect AN/GRM–50 output to fabricated load C test point A (fig. 3–1), and ME–26(*)/U

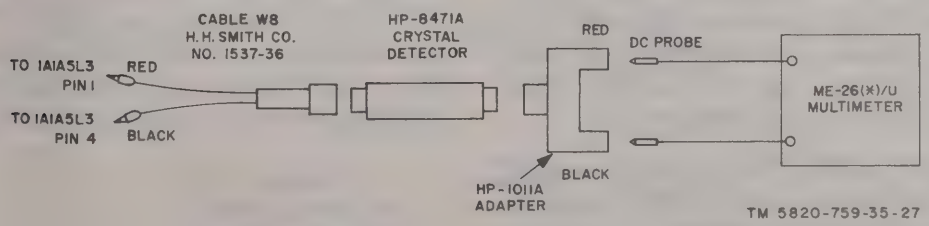


Figure 3–8. ME–26(*)/U test setup connections.

to terminal E147 on amplifier subassembly 1A1A5 (fig. 3–6). Set AN/GRM–50 controls to produce a 2.0 MHz cw output signal at 50 mv. Rotate preselector shaft one-quarter turn from the counterclockwise end stop. Turn on power supplies A and B.

(8) Adjust tuning slugs of coils 1A1A5L1 through 1A1A5L4 to obtain a peak indication on ME–26(*)/U.

NOTE

The position of these tuning slugs should be fairly even from coil to coil, otherwise the unit may not track properly.

(9) Set AN/GRM–50 controls to produce a 2.2 MHz cw output signal at 50 mv. Adjust preselector shaft to obtain maximum ME–26(*)/U indication. Readjust tuning slugs of coils 1A1A5L1 through 1A1A5L4 for a peak indication. Only a small amount of tuning should be required.

(10) Set AN/GRM–50 controls to produce a 3.0 MHz cw output signal at 50 mv. Adjust preselector shaft to obtain a maximum indication on the ME–26(*)/U. Adjust capacitors 1A1A5C36, 1A1A5C37, 1A1A5C38, and 1A1A5C40 (fig. 3–6②), for peak indication on the ME–26(*)/U.

NOTE

Repeat steps (9) and (10) above until no interaction is evident.

NOTE

In the following steps, do not disturb the settings of the coils and capacitors adjusted in steps (9) and (10) above.

(11) Turn off +200 Vdc output at power supply A. Set band switch at 4.0 MHz position (fig. 3–5). Set AN/GRM–50 controls to produce a 4.5 MHz cw output signal at 50 mv. Energize the +200 Vdc output at power supply A. Adjust preselector shaft to obtain a maximum ME–26(*)/U indication and adjust capacitors 1A1A1C4, 1A1A2C16, 1A1A3C23, and 1A1A4C31 (fig. 3–6①), for peak ME–26(*)/U indication.

(12) Turn off +200 Vdc output at power supply A. Set band switch at 7.0 MHz position (fig. 3–5). Set AN/GRM–50 controls to produce an 8.2 MHz cw output signal at 50 mv. Energize the +200 Vdc output at power supply A. Adjust preselector shaft to obtain a maximum ME–26(*)/U indication. Adjust capacitors 1A1A1C1, 1A1A2C13, 1A1A3C20, and 1A1A4C28 (fig. 3–6①), for peak ME–26(*)/U indication.

(13) Turn off +200 Vdc output at power supply A. Set band switch at 12.0 MHz position (fig. 3–5). Set AN/GRM–50 controls to produce a 15.0 MHz cw output signal at 50 mv. Energize the +200 Vdc output at power supply A. Adjust preselector shaft to obtain a maximum ME–26(*)/U indication. Adjust capacitors 1A1A1C6, 1A1A2C18, 1A1A3C25, and 1A1A4C33 (fig. 3–6①), for a peak ME–26(*)/U indication.

(14) Turn off +200 Vdc output at power supply A. Set band switch at 2.0 MHz position (fig. 3–5). Energize the +200 Vdc output at power supply A and turn on power supply C. Using the preselector shaft, peak the output indication on the ME–26(*)/U, with the AN/GRM–50 set at the following frequencies.

Frequency	*Output*
2.0 MHz at 50 mv	15 ±10 Vac
2.2 MHz at 50 mv	16 ±6 Vac
3.0 MHz at 50 mv	8 ±2 Vac

The indicated output should be within the limits listed.

(15) Turn off +200 Vdc output at power supply A. Set band switch at 4.0 MHz position (fig. 3–5). Energize the +200 Vdc output at power supply A. Using the preselector shaft, peak the output indication on the ME–26(*)/U, with the AN/GRM–50 set at the following frequencies.

Frequency	*Output*
3.0 MHz at 50 mv	38 ±12 Vac
4.5 MHz at 50 mv	20 ±7 Vac
5.0 MHz at 50 mv	13 ±5 Vac

The indicated output should be within the limits listed.

(16) Turn off +200 Vdc output at power supply A. Set band switch at 7.0 MHz position (fig. 3–5). Energize the +200 Vdc output at power supply A. Using the preselector shaft, peak the output indication on ME–26(*)/U, with the AN/GRM–50 set at the following frequencies.

Frequency	*Output*
5.0 MHz at 50 mv	32 ±7 Vac
5.5 MHz at 50 mv	30 ±6 Vac
8.2 MHz at 50 mv	20 ±6 Vac
9.0 MHz at 50 mv	15 ±6 Vac

The indicated output should be within the limits listed.

(17) Turn off +200 Vdc output at power supply A. Set band switch at 12 MHz position (fig. 3–5). Energize the +200 Vdc output at power supply A. Using the preselector shaft, peak the output indication on the ME–26(*)/U, with the AN/GRM–50 set at the following frequencies.

Frequency	*Output*
9.0 MHz at 50 mv	28 ±14 Vac
12.0 MHz at 50 mv	24 ±9 Vac
15.0 MHz at 50 mv	17 ±9 Vac

The indicated output should be within the limits listed.

(18) Turn off all power supplies and disconnect all test equipment.

3–8. Synthesizer 1A2

The troubleshooting and alignment procedures necessary for synthesizer 1A2 are outlined in the following paragraphs. Perform the troubleshooting procedures in *a* below to isolate the faulty component. After the faulty component has been isolated, refer to paragraph 3–3 for general repair instructions and to *b* below for the necessary alignment procedures.

a. Troubleshooting. To troubleshoot synthesizer 1A2, perform the following procedures:

(1) *Initial setup and checks.*

(*a*) Connect all test equipment as shown in figure 3–9 and turn power on.

(*b*) At TS–2664/GRM–90, set FREQUENCY KILOCYCLES controls at 2444 kHz and FUNCTION switch at CW.

(*c*) At synthesizer 1A2, connect AN/USM–281 oscilloscope probe to the signal side of resistor 1A2R70 (lead going to C–45) (fig. 3–10 and 6–14).

(*d*) At TS–2664/GRM–90 rf oscillator 1A17 assembly, adjust AMPL. ADJ. control to obtain a 2 volt peak-to-peak waveform on AN/USM–281. Disconnect AN/USM–281 probe.

(2) *1 MHz Spectrum.*

(*a*) At synthesizer 1A2, connect AN/USM–281 oscilloscope probe to the collector of transistor 1A2Q1 (fig. 3–10). Check the displayed waveform with the waveform shown in figure 3–11. If proper waveform is not obtained, refer to figures 3–10 and 6–14 and table 3–2 and troubleshoot the circuitry associated with transistors 1A2Q1 and 1A2Q20.

(*b*) Connect Transmission Test Set AN/USM–306 probe to terminal 1A2E84. Tune AN/USM–306 for peaks at 11.0 MHz and all even 1 MHz steps from 11.0 to 23.0 MHz. The output level at each 1 MHz step should be —40db±10db. Disconnect AN/USM–306. If output indications are improper, refer to figures 3–10 and 6–14, and table 3–2 and troubleshoot the circuitry associated with transistors 1A2Q14 and 1A2Q15.

(3) *100 kHz Spectrum.*

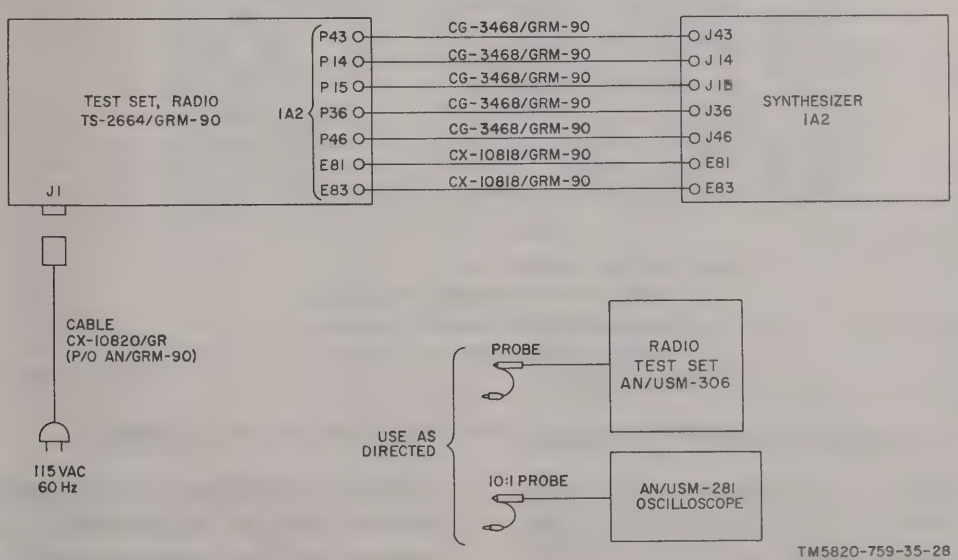


Figure 3–9. Synthesizer 1A2 test setup.

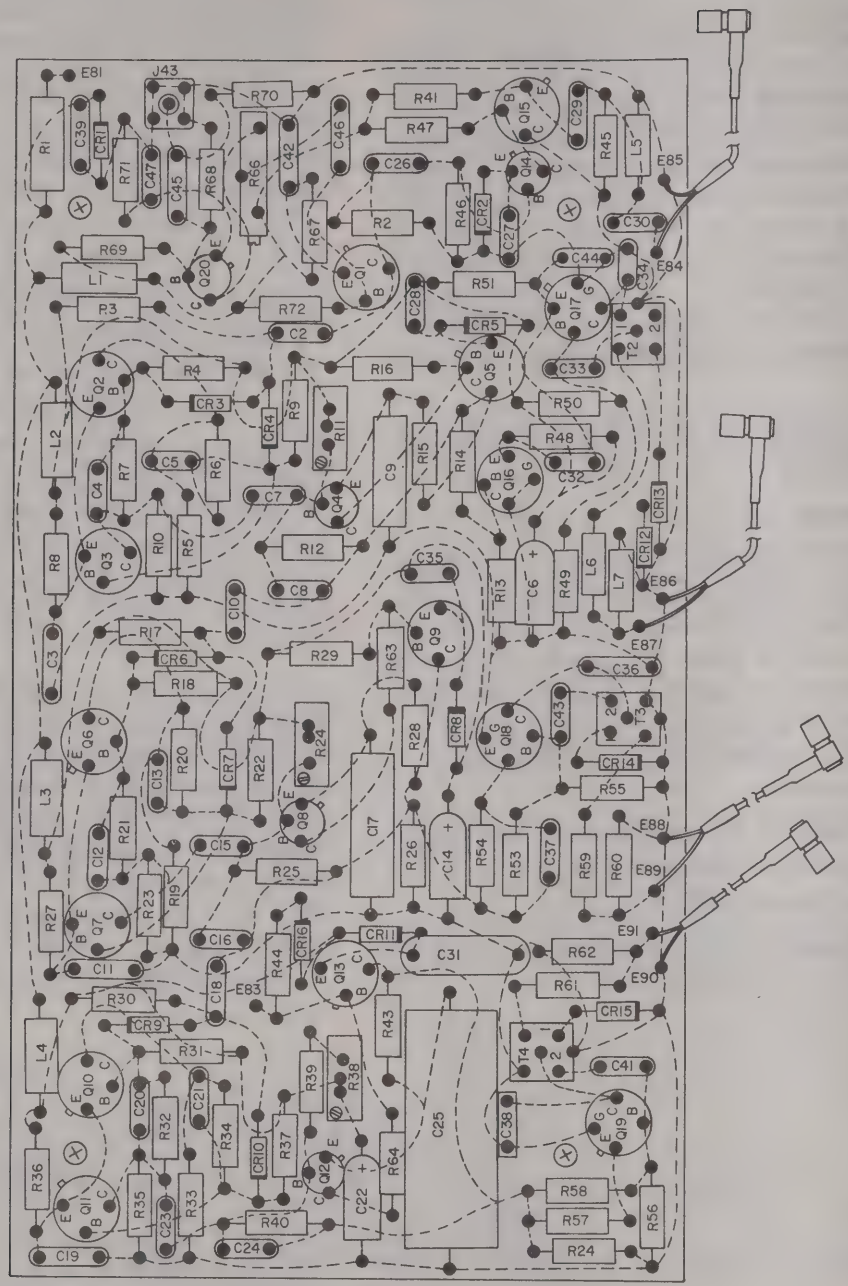


Figure 3–10. Synthesizer 1A2 component location and printed wiring.

(*a*) Connect AN/USM–281 oscilloscope probe to the base of transistor 1A2Q16 (fig. 3–10). Check the displayed waveform with the waveform shown in figure 3–12. Disconnect AN/USM–281 probe. If proper waveform is not obtained, refer to figures 3–10 and 6–14 and table 3–2 and troubleshoot the circuitry associated with transistors 1A2Q2 through 1A2Q5.

(*b*) At AN/GRM–90 frequency mixer 1A3 assembly (fig. 3–16), connect AN/USM–306

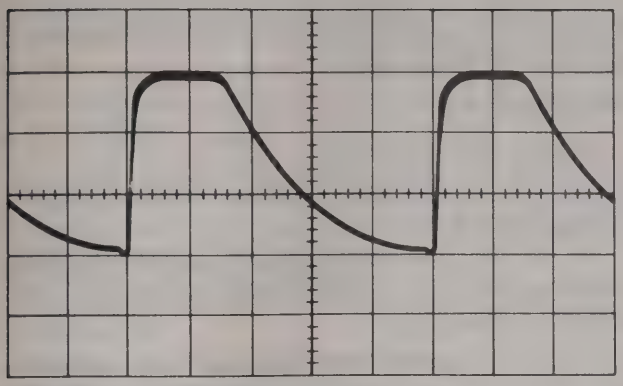


Figure 3–11. Transistor 1A2Q1 collector waveform.

probe to signal side of resistor (lead to C32 and C39) 1A3R34 (fig. 6–15). Set AN/USM–306 at 21.9 MHz and tune for peak.

(*c*) At TS–2664/GRM–90, rotate 100 kHz FREQUENCY KILOCYCLES control from 0 to 9. Set 100 kHz FREQUENCY KILOCYCLES control at 4. The output indication on the AN/USM–306 should not change by more than 6 db and should be at least —38db±5db at all positions.

Table 3–2. Synthesizer 1A2 DC Voltages

Stage	Emitter	Base	Collector
Q1	8.8 v	8.7 v	5.7 v
Q2	7.3 v	7.7 v	4.0 v
Q3	7.3 v	7.6 v	4.0 v
Q4	6.6 v	6.0 v	8.6 v
Q5	8.4 v	8.6 v	1.1 v
Q6	7.8 v	8.0 v	4.3 v
Q7	7.8 v	8.0 v	4.3 v
Q8	6.6 v	6.1 v	8.6 v
Q9	8.6 v	8.6 v	4.3 v
Q10	7.8 v	7.9 v	4.4 v
Q11	7.8 v	7.9 v	4.4 v
Q12	6.0 v	5.4 v	8.6 v
Q13	8.6 v	8.6 v	0.82 v
Q14	7.3 v	−0.72 v	7.9 v
Q15	8.1 v	7.3 v	0.0 v
Q16	0.59 v	0.53 v	0.0 v
Q17	6.3 v	7.1 v	0.0 v
Q18	1.4 v	1.1 v	0.0 v
Q19	0.77 v	0.67 v	0.0 v
Q20	3.9 v	4.2 v	7.9 v

NOTES

1. All votage reading in table above taken with ME–26(*)/U.
2. Unless otherwise noted, all voltage readings taken with FREQUENCY KILOCYCLES knobs set at 2.555 MHz, FUNCTION knob set at CW, receive mode.

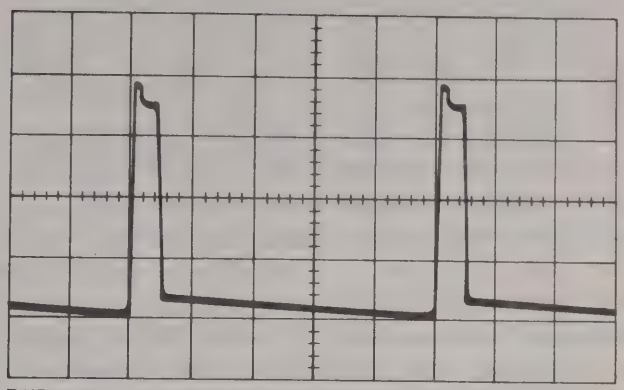


Figure 3–12. Transistor 1A2Q16 base waveform.

(*d*) If improper indications are obtained, refer to figures 3–10 and 6–14 and table 3–2 and troubleshoot the circuitry associated with transistors 1A2Q16 and 1A2Q17.

(4) *10 kHz Spectrum.*

(*a*) Connect AN/USM–281 oscilloscope probe to the collector of transistor 1A2Q9 (fig. 3–10). Check displayed waveform with the waveform shown in figure 3–13. If proper indication is not obtained, refer to figures 3–10 and 6–14 and table 3–2 and troubleshoot the circuitry associated with transistors 1A2Q6 through 1A2Q9. Disconnect AN/USM–281 probe.

(*b*) At TS–2664/GRM–90, set FUNCTION switch at STBY and extend frequency mixer 1A4 assembly for access by using the necessary extension cables.

(*c*) At TS–2664/GRM–90, set FUNCTION switch at CW.

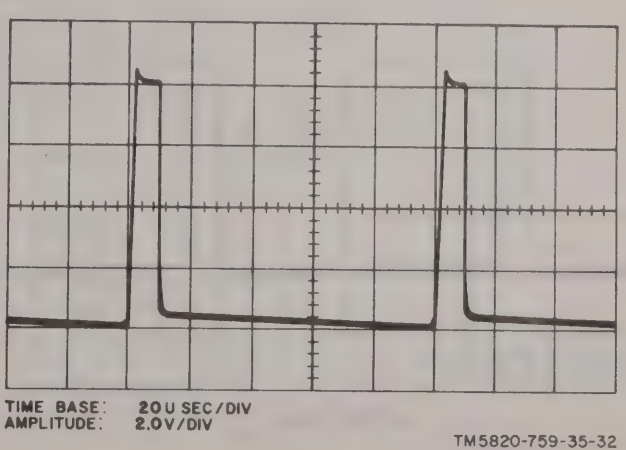


Figure 3–13. Transistor 1A2Q9 collector waveform.

(*d*) At TS–2664/GRM–90 frequency mixer 1A4 assembly, connect the AN/USM–306 probe to the junction of resistor 1A4R5 and the base of transistor 1A4Q2 (fig. 3–18). Tune the AN/USM–306 for a peak at 646.5 kHz.

(*e*) At TS–2664/GRM–90, rotate 10 kHz FREQUENCY KILOCYCLES control from 0 to 9. Set 10 kHz FREQUENCY KILOCYCLES control at 4. The output indication on the AN/USM–306 should not change by more than 6 db and should be greater than —38db±5db for all positions. Disconnect the AN/USM–306. If proper indications are not obtained, refer to figures 3–10 and 6–14 and table 3–2 and troubleshoot circuitry associated with transistor 1A2Q18.

(5) *1 kHz Spectrum.*

(*a*) Connect AN/USM–281 oscilloscope probe to the collector of transistor 1A2Q13 (fig. 3–10). Check the displayed waveform with the waveform shown in figure 3–14. Disconnect AN/USM–281 probe. If proper indication is not obtained, refer to figures 3–10 and 6–14 and table 3–2 and troubleshoot circuitry associated with transistors 1A2Q10 through 1A2Q13.

(*b*) Refer to (4) above and perform steps (*b*) and (*c*).

(*c*) Tune AN/USM–306 for a peak at 1.1015 MHz.

(*d*) At synthesizer 1A2, adjust transformer 1A2T4 (fig. 3–10), for a peak on the AN/USM–306.

(*e*) At TS–2664/GRM–90, rotate 1 kHz FREQUENCY KILOCYCLES control from 0 to 9. The output indication on the AN/USM–306 should not change by more than 6 db and should be greater than —52db±5db at all positions. Disconnect AN/USM–306. If proper indications are not obtained, refer to figures 3–10 and 6–14 and table 3–2 and troubleshoot circuitry associated with transistor 1A2Q19.

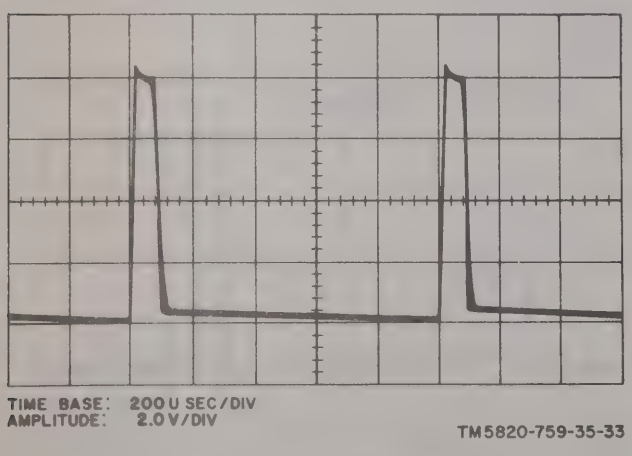


Figure 3–14. Transistor 1A2Q13 collector waveform.

b. Alignment.

(1) *Initial Checks.*

(*a*) Connect equipment as shown in figure 3–9 and turn power on.

(*b*) At TS–2664/GRM–90, set FUNCTION switch at CW and FREQUENCY KILOCYCLES controls at 2444 kHz.

(*c*) At synthesizer 1A2 (fig. 3–10), connect AN/USM–281 oscilloscope probe to the signal side of resistor 1A2R70. At TS–2664/GRM–90 rf oscillator 1A17 assembly, adjust AMPL. ADJ. control to obtain a 2 volt peak-to-peak waveform. Disconnect AN/USM–281 probe.

(2) *1 MHz Spectrum Output Alignment.*

(*a*) At synthesizer 1A2, connect AN/USM–281 probe to the collector of transistor 1A2Q1 (fig. 3–10), and adjust resistor 1A2R66 to obtain a waveform as shown in figure 3–11. Disconnect AN/USM–281 probe.

(*b*) Connect AN/USM–306 probe to terminal 1A2E84 (fig. 3–10). Tune AN/USM–306 for a peak at 11.0 MHz and all even 1 MHz steps from 11.0 MHz to 23.0 MHz. The measured output levels should be —40db ±10db at each step. Disconnect AN/USM–306.

(3) *100 kHz Spectrum Output Alignment.*

(*a*) At synthesizer 1A2, connect AN/USM–281 oscilloscope probe to the base of transistor 1A2Q16 (fig. 3–10). Adjust resistor 1A2R11 to obtain waveform shown in figure 3–12. Disconnect AN/USM–281 probe.

(*b*) At TS–2664/GRM–90 frequency mixer 1A3 assembly, connect AN/USM–306 to signal side of resistor 1A3R34. Set AN/USM–306 at 21.9 MHz and tune for a peak.

(*c*) At TS–2664/GRM–90, set 100 kHz FREQUENCY KILOCYCLES control at 4.

(*d*) At synthesizer 1A2, adjust tuning slug of transformer 1A2T2 for a peak indication on AN/USM–306.

(*e*) At TS–2664/GRM–90, rotate 100 kHz FREQUENCY KILOCYCLES control from 0 to 9. Observe that AN/USM–306 indication is greater than —38db±5db at all positions and that indication does not change by more than 6 db. Disconnect AN/USM–306.

(4) *10 kHz Spectrum Output Alignment.*

(*a*) At synthesizer 1A2, connect AN/

USM–281 oscilloscope probe to the collector of transistor 1A2Q9 (fig. 3–10), and set resistor 1A2R4 at the center of the range that provides the waveform as shown in figure 3–13. Disconnect AN/USM–281 probe.

(*b*) At TS–2664/GRM–90, set FUNCTION switch at STBY and extend frequency mixer 1A4 assembly from TS–2664/GRM–90 for access by using the necessary extension cables.

(*c*) At TS–2664/GRM–90, set FUNCTION switch at CW.

(*d*) At TS–2664/GRM–90 frequency mixer 1A4 assembly, connect AN/USM–306 probe to the junction of resistor 1A4R5 and the base of transistor 1A4Q2 (fig. 3–18). Tune AN/USM–306 for a peak at 646.5 kHz.

(*e*) At TS–2664/GRM–90, set 10 kHz FREQUENCY KILOCYCLES control at 4.

(*f*) At synthesizer 1A2, adjust tuning slug of transformer 1A2T3 (fig. 3–10), for peak indication on AN/USM–306.

(*g*) At TS–2664/GRM–90, rotate 10 kHz FREQUENCY KILOCYCLES control from 0 to 9. Observe that AN/USM–306 indication is greater than —38db±5db at all positions and that indication does not vary by more than 6 db. Disconnect AN/USM–306.

(5) *1 kHz Spectrum Output Alignment.*

(*a*) At synthesizer 1A2, connect AN/USM–281 oscilloscope probe to the collector of transistor 1A2Q13 (fig. 3–10). Set resistor 1A2R38 at the center of the range that provides the waveform as shown in figure 3–14. Disconnect AN/USM–281 probe.

(*b*) At TS–2664/GRM–90 frequency mixer 1A4 assembly, connect AN/USM–306 probe to the base of transistor 1A4Q4. Tune AN/USM–306 for a peak at 1.1015 MHz.

(*c*) At TS–2664/GRM–90, set 1 kHz FREQUENCY KILOCYCLES control at 4.

(*d*) At synthesizer 1A2, adjust tuning slug of transformer 1A2T4 (fig. 3–10), for peak indication on AN/USM–306

(*e*) At TS–2664/GRM–90, rotate 1 kHz FREQUENCY KILOCYCLES control from 0 to 9. Observe that AN/USM–306 indication is greater than —52db±5db at all positions and that indication does not vary by more than 6 db. Disconnect all test equipment.

3–9. Frequency Mixer 1A3

The troubleshooting and alignment procedures necessary for frequency mixer 1A3 are outlined in the following paragraphs. Perform the troubleshooting procedures in *a* below to isolate the faulty component. After the faulty component has been isolated, refer to paragraph 3–3 for general repair instructions and to *b* below for the necessary alignment procedures.

a. Troubleshooting. To troubleshoot frequency mixer 1A3, perform the following procedures:

(1) *Initial Setup and Checks.*

(*a*) Connect all test equipment as shown in figure 3–15 and turn the power on.

(*b*) At TS–2664/GRM–90, set FREQUENCY KILOCYCLES controls at 2555 kHz and FUNCTION switch at CW.

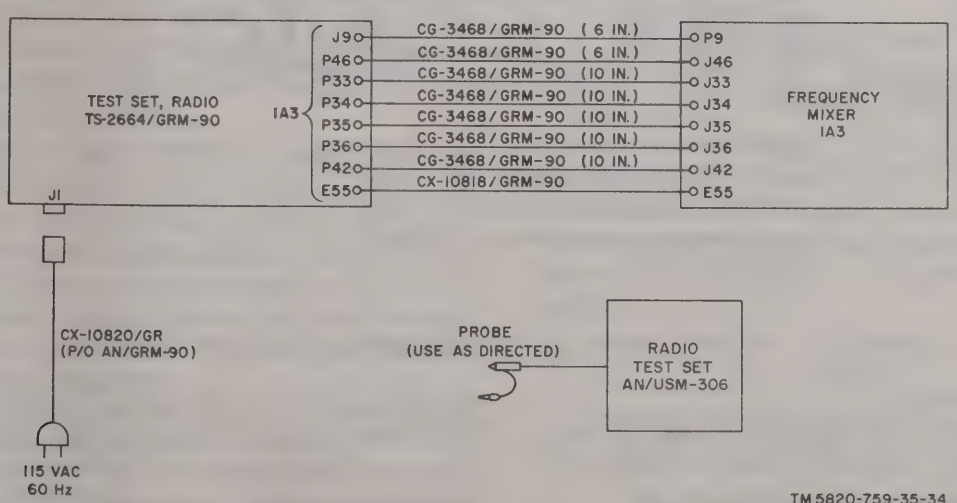


Figure 3–15. Frequency mixer 1A3 test setup.

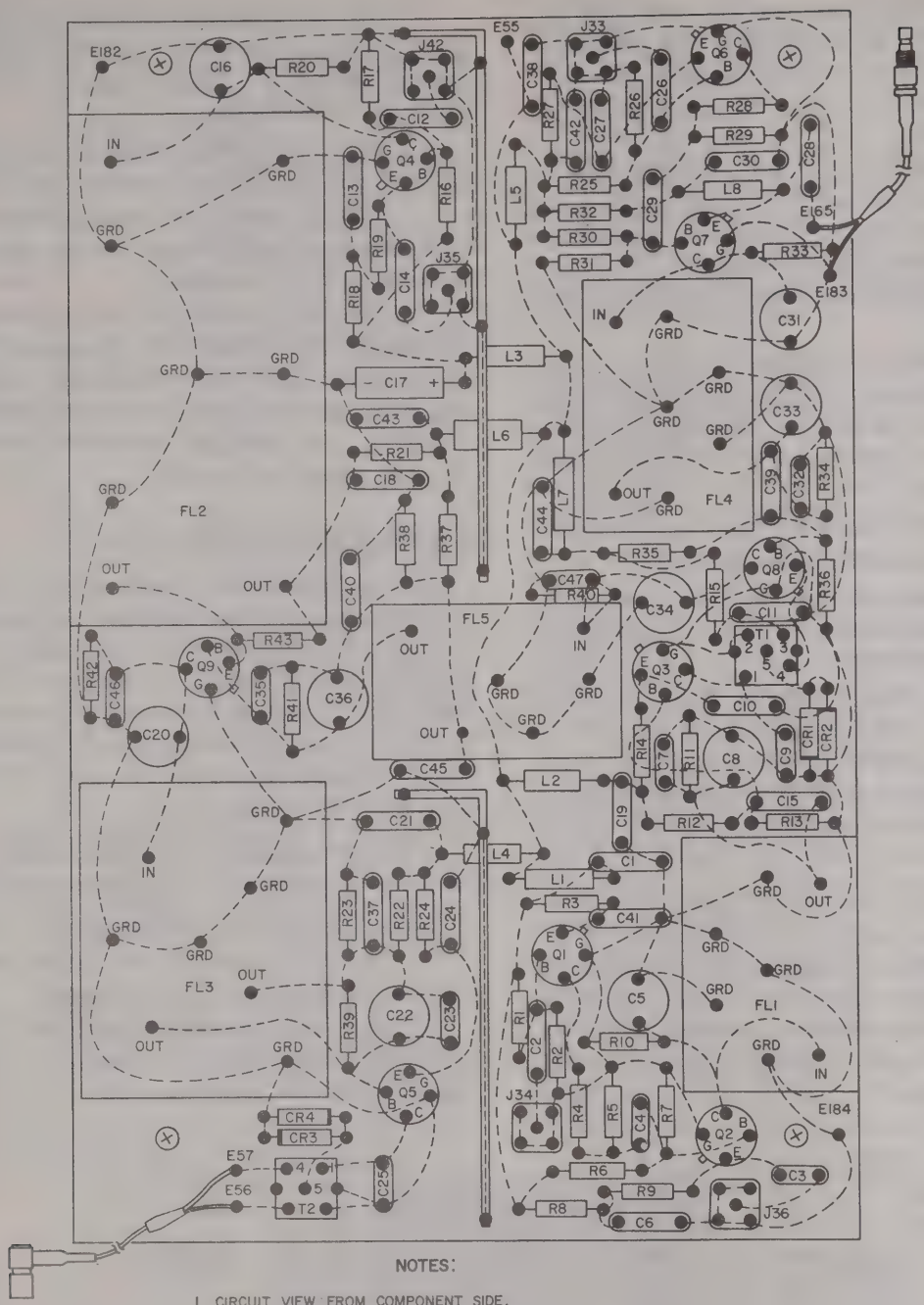


Figure 3–16. Frequency mixer 1A3 component locations and printed wiring.

(2) *7.7 MHz Filter.*

(*a*) Connect AN/USM–306 probe to the base of transistor 1A3Q3 (fig. 3–16). Tune AN/USM–306 for peak indication at 7.7 MHz.

(*b*) At TS–2664/GRM–90, rotate 1000 kHz FREQUENCY KILOCYCLES control from 2 to 14 and back to 2. Indication observed on AN/USM–306 should be —10db±15db at all positions. If proper indications are not obtained, refer to figures 3–16 and 6–15 and table 3–3 and troubleshoot circuitry associated with transistors 1A3Q1, 1A3Q2, and filter 1A3FL1.

(*c*) Connect AN/USM–306 probe to the cathode of diode 1A3CR2 (fig. 3–16). Tune AN/USM–306 for peak indication at 7.7 MHz.

(*d*) At TS–2664/GRM–90, rotate 1000 kHz FREQUENCY KILOCYCLES control from 2 to 14 and back to 2. Indication observed on AN/USM–306 should be —10db±15db at all positions. If proper indications are not obtained, refer to figures 3–16 and 6–15 and table 3–3 and troubleshoot circuitry associated with transistor 1A3Q3.

Table 3–3. Frequency Mixer 1A3 DC Voltages

Stage	Emitter	Base	Collector
Q1	7.3 v	7.2 v	0.50 v
Q2	9.6 v	9.4 v	0.0 v
Q3	9.7 v	9.5 v	0.0 v
Q4	9.9 v	9.7 v	0.0 v
Q5	9.8 v	9.6 v	0.0 v
Q6	7.6 v	7.4 v	0.48 v
Q7	9.6 v	9.4 v	0.0 v
Q8	10.7 v	10.6 v	0.0 v
Q9	9.9 v	9.6 v	0.0 v

NOTES

1. All voltage readings in table above taken with ME–26(*)/U.
2. Unless otherwise noted, all voltage readings taken with TS–2664/GRM–90 FREQUENCY KILOCYCLES controls set at 2.555 MHz, FUNCTION knob set at CW, receive mode.

(3) *21.9 MHz Filter.*

(*a*) At frequency mixer 1A3, disconnect 1P34 and 1P36 from 1A3J34 and 1A3J36, respectively (fig. 3–16).

(*b*) Connect AN/USM–306 probe to the base of transistor 1A3Q8. Tune AN/USM–306 for peak indication at 21.9 MHz.

(*c*) At TS–2664/GRM–90, rotate 100 kHz FREQUENCY KILOCYCLES control from 0 to 9 and back to 5. Indication observed on AN/USM–306 should be —32db±10db at all positions. If proper indication is not obtained, refer to figures 3–16 and 6–15 and table 3–3 and troubleshoot circuitry associated with transistors 1A3Q6, 1A3Q7, and filter 1A3FL4.

(*d*) Reconnect 1P34 and 1P36 to 1A3J34 and 1A3J36, respectively.

(4) *14.2 MHz Filter.*

(*a*) Disconnect 1P42 and 1P35 from 1A3J42 and 1A3J35, respectively (fig. 3–16).

(*b*) Connect AN/USM–306 probe to the base of transistor 1A3Q9 (fig. 3–16). Tune AN/USM–306 for peak indication at 14.2 MHz.

(*c*) The indication observed on the AN/USM–306 should be —18db±14db. If proper indication is not obtained, refer to figures 3–16 and 6–15 and table 3–3 and troubleshoot circuitry associated with transistor 1A3Q8 and filter 1A3FL5.

(*d*) Reconnect 1P42 and 1P35 to 1A3J42 and 1A3J35, respectively.

(5) *11.6 MHz Filter.*

(*a*) Connect AN/USM–306 probe to 1A3E56 and ground probe to 1A3E57. Tune AN/USM–306 for peak indication at 11.6 MHz.

(*b*) The indication observed on the AN/USM–306 should be —18db±14db. If proper indication is not obtained, refer to figures 3–16 and 6–15 and table 3–3 and troubleshoot circuitry associated with transistors 1A3Q9, 1A3Q5, and filter 1A3FL3.

b. Alignment.

(1) *Initial Checks.*

(*a*) Connect equipment as shown in figure 3–15 and turn power on.

(*b*) At TS–2664/GRM–90, set FREQUENCY KILOCYCLES controls at 2555 kHz and FUNCTION switch at CW.

(2) *7.7 MHz Filter Alignment.*

(*a*) At frequency mixer 1A3, connect AN/USM–306 probe to the cathode of diode 1A3CR2 (fig. 3–16). Tune AN/USM–306 for a peak at 7.7 MHz.

(*b*) Adjust, in the order listed, capacitors 1A3C5, 1A3C8, and transformer 1A3T1 (fig. 3–16), for peak indication on AN/USM–306.

(*c*) At TS–2664/GRM–90, rotate 1000 kHz FREQUENCY KILOCYCLES control from 2 to 14 and back to 2. Observe that AN/USM–306 indication stays within the range of —12db to —8db at all positions. Disconnect AN/USM–306 probe.

NOTE

AN/USM–306 may have to be slightly retuned at the different control positions.

(*d*) At frequency mixer 1A3, connect AN/USM–306 probe to the junction of resistors 1A3R12 and 1A3R13 (fig. 3–16).

(*e*) Adjust capacitors 1A3C5 and 1A3C8 for peak indication on AN/USM–306. Disconnect AN/USM–306.

(*f*) Repeat steps (*a*) and (*c*) above to check alignment.

(3) *21.9 MHz Filter Alignment.*

(*a*) At frequency mixer 1A3, disconnect 1P34 and 1P36 from 1A3J34 and 1A3J36 (fig. 3–16), respectively.

(*b*) Tune AN/USM–306 to 21.9 MHz and connect AN/USM–306 probe to the base of transistor 1A3Q8 (fig. 3–16). Fine tune AN/USM–306 for a peak.

(*c*) At frequency mixer 1A3, adjust capacitors 1A3C31 and 1A3C33 for a peak indication on AN/USM–306.

(*d*) At TS–2664/GRM–90, rotate 100 kHz FREQUENCY KILOCYCLES control from 0 to 9. Observe that AN/USM–306 indication stays between —38db and —28db at all positions. Set 100 kHz FREQUENCY KILOCYCLES control at 5.

NOTE

The AN/USM–306 may have to be slightly retuned at the different control positions.

(*e*) Reconnect 1P34 and 1P36 to 1A3J34 and 1A3J36, respectively. Disconnect AN/USM–306 probe.

(4) *14.2 MHz Filter Alignment.*

(*a*) At frequency mixer 1A3, disconnect 1P42 and 1P35 from 1A3J42 and 1A3J35 (fig. 3–16), respectively.

(*b*) Tune AN/USM–306 to 14.2 MHz and connect AN/USM–306 probe to the base of transistor 1A3Q9 (fig. 3–16). Fine tune AN/USM–306 for a peak.

(*c*) At frequency mixer 1A3, adjust capacitor 1A3C36 for a peak indication on AN/USM–306. The indicated output should be —18db±15db.

(*d*) Reconnect 1P42 and 1P35 to 1A3J42 and 1A3J35, respectively. Disconnect AN/USM–306.

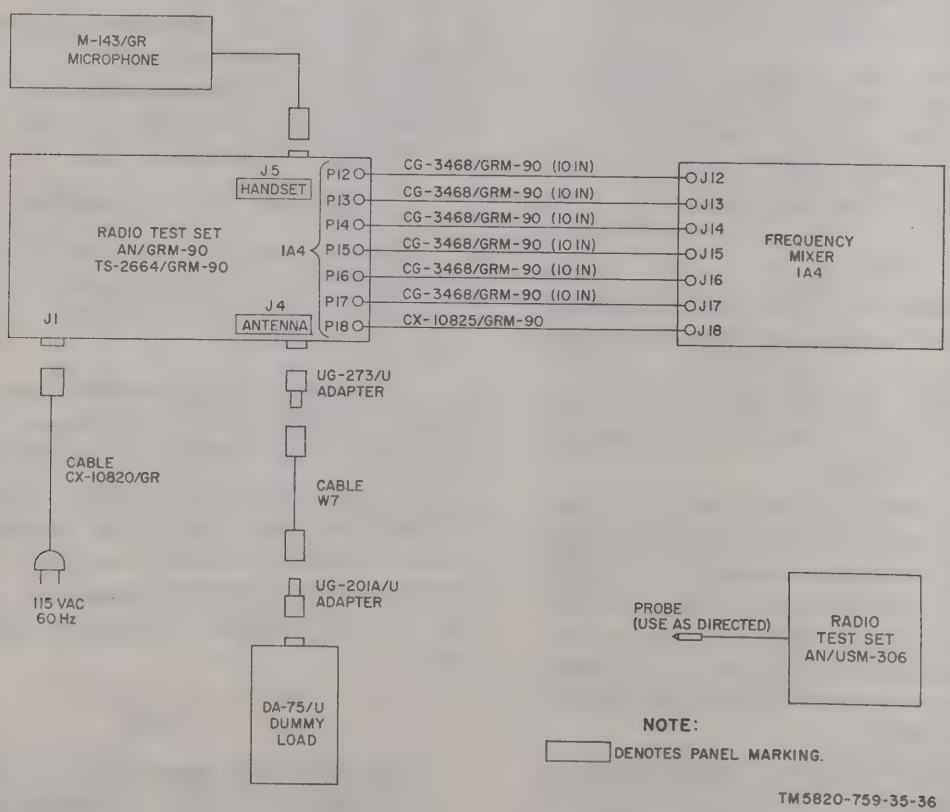


Figure 3–17. Frequency mixer 1A4 test setup.

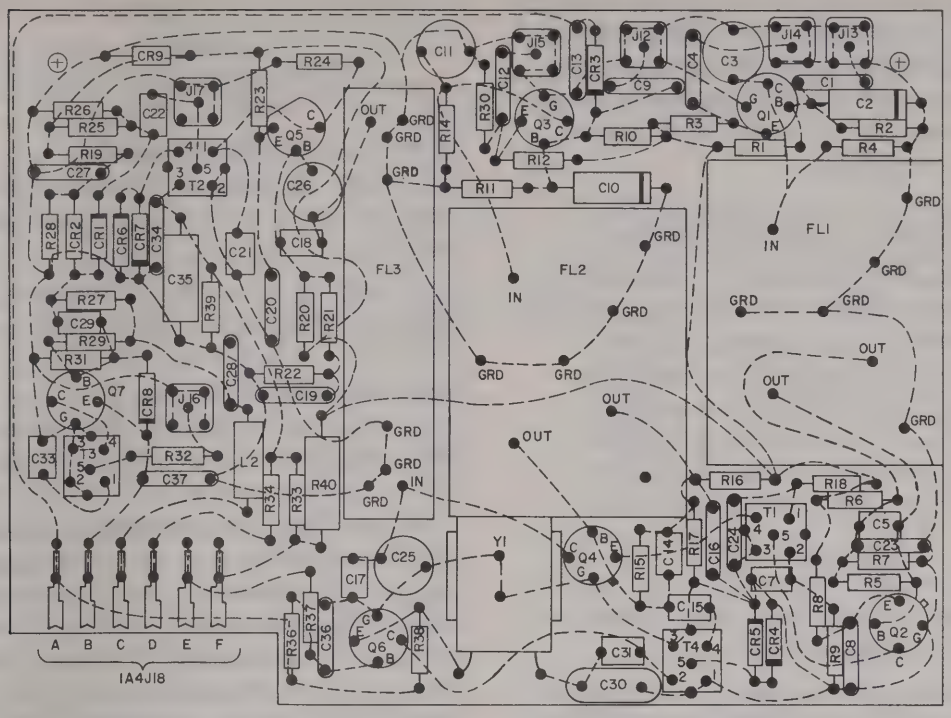


Figure 3–18. Frequency mixer 1A4 component locations and printed wiring.

(5) *Frequency Mixer 1A3 Final Alignment.*

(*a*) Connect AN/USM–306 probe to terminal 1A3E56 and probe ground clip to terminal 1A3E57 (fig. 3–16).

(*b*) At frequency mixer 1A3, adjust capacitors 1A3C5, 1A3C8, transformer 1A3T1, capacitors 1A3C33, 1A3C22, and transformer 1A3T2 for peak indication on AN/USM–306.

(*c*) At frequency mixer 1A3, disconnect 1P36 from 1A3J36 (fig. 3–16).

(*d*) At frequency mixer 1A3, adjust capacitors 1A3C31, 1A3C34, 1A3C36, 1A3C16, and 1A3C20 for peak indication on AN/USM–308. The output indication on the AN/USM–306 should be —18db±14db.

(*e*) Disconnect all equipment.

3–10. Frequency Mixer 1A4

The troubleshooting and alignment procedures necessary for frequency mixer 1A4 are outlined in the following paragraphs. Perform the troubleshooting procedures in *a* below to isolate the faulty component. After the faulty component has been isolated, refer to paragraph 3–3 for general repair instructions and to *b* below for the necessary alignment procedures.

a. Troubleshooting. To troubleshoot frequency mixer 1A4, perform the following procedures:

(1) *Initial Setup and Checks.*

(*a*) Connect all equipment as shown in figure 3–17 and turn power on.

(*b*) At TS–2664/GRM–90, set FREQUENCY KILOCYCLES controls at 2555 kHz and FUNCTION switch at CW.

(2) *646.5 MHz Filter.*

(*a*) At frequency mixer 1A4, disconnect 1P12 and 1P15 from 1A4J12 and 1A4J15, respectively, fig. 3–18.

(*b*) Connect AN/USM–306 probe to the emitter of transistor 1A4Q4 (use foil side of board). Tune AN/USM–306 for a peak at 646.5 MHz.

(*c*) At TS–2664/GRM–90, rotate 10 kHz FREQUENCY KILOCYCLES control from 0 to 9. Set 10 kHz FREQUENCY KILOCYCLES con-

trol at 5. Output indication should be —18db±14db at all positions. Disconnect AN/USM–306. If proper indications are not obtained, refer to figures 3–18 and 6–16 and table 3–4 and troubleshoot circuitry associated with transistors 1A4Q1, 1A4Q2, and filter 1A4FL1.

Table 3–4. Frequency Mixer 1A4 DC Voltages

Stage	Emitter	Base	Collector
Q1	6.7 v	6.5 v	0.0 v
Q2	6.8 v	6.5 v	0.0 v
Q3	6.6 v	6.4 v	0.0 v
Q4	6.9 v	6.3 v	0.0 v
Q5	7.2 v	6.5 v	0.0 v
Q6[a]	11.5 v	11.5 v	0.0 v
Q7[b]	7.2 v	7.0 v	0.0 v

NOTES

1. All voltage readings in table above taken with ME–26(*)/U.
2. Unless otherwise noted, all voltage readings taken with TS/2664/GRM–90 FREQUENCY KILOCYCLES controls set at 2.555 MHz, FUNCTION switch set at CW, receive mode.

a Stage Q6 voltages taken in am. receive mode with 1 kHz FREQUENCY KILOCYCLES control pulled out.

b Stage Q7 voltages taken in am. transmit mode.

NOTE

If output indication is not symmetrical around position 5 on the 10 kHz FREQUENCY KILOCYCLES control, refer to the alignment procedures in *b*(2) below.

(*d*) Reconnect 1P12 and 1P15 to 1A4J12 and 1A4J15, respectively.

(3) *1.1015 MHz Filter.*

(*a*) At frequency mixer 1A4, disconnect 1P13 and 1P14 from 1A4J13 and 1A4J14, respectively (fig. 3–18).

(*b*) Connect AN/USM–306 probe to the collector of transistor 1A4Q4 (use foil side of board). Tune AN/USM–306 for peak indication at 1.1015 MHz.

(*c*) At TS–2664/GRM–90, rotate 1kHz FREQUENCY KILOCYCLES control from 0 to 9. Set 1 kHz FREQUENCY KILOCYCLES control at 5. The output indication should be —18db±14db for all positions. Disconnect AN/USM–306. If proper indications are not obtained, refer to figures 3–18 and 6–16 and table 3–4 and troubleshoot circuitry associated with transistor 1A4Q3 and filter 1A4FL2.

(*d*) Reconnect 1P13 and 1P14 to 1A4J13 and 1A4J14, respectively.

(4) *1.1015 MHz Oscillator.*

(*a*) At frequency mixer 1A4, disconnect 1P13 and 1P14 from 1A4J13 and 1A4J14, respectively (fig. 3–18).

(*b*) Connect AN/USM–306 probe to the collector of transistor 1A4Q4 at foil side of board (fig. 3–18). Tune AN/USM–306 for peak indication at 1.1015 MHz.

(*c*) At TS–2664/GRM–90, pull out 1 kHz FREQUENCY KILOCYCLES control to energize 1.1015 MHz oscillator.

(*d*) The output voltage indicated on the AN/USM–306 should be —18db±14db. Disconnect AN/USM–306. If proper indication is not obtained, refer to figures 3–18 and 6–16 and table 3–4 and troubleshoot circuitry associated with transistors 1A4Q6 and 1A4Q4.

(*e*) Reconnect 1P13 and 1P14 to 1A4J13 and 1A4J14, respectively.

(5) *455 kHz Filter.*

(*a*) Connect AN/USM–306 to the junction of connector 1A4J17 and capacitor 1A4C22. Tune AN/USM–306 for peak indication at 455 kHz.

(*b*) The output level indicated on the AN USM–306 should be —11db±18db.

(*c*) At TS–2664/GRM–90, rotate both the 10 kHz and 1 kHz FREQUENCY KILOCYCLES controls through their entire range and observe that the indicated output level remains within the tolerance shown in step (*b*) above. If proper indications are not obtained, refer to figures 3–18 and 6–16 and table 3–4 and troubleshoot circuitry associated with filter 1A4FL3 and transistor 1A4Q5.

(*d*) At TS–2664/GRM–90, set FUNCTION switch at AM. Observe that output indicated on AN/USM–306 goes to 0. If proper indication is not obtained, refer to figures 3–18 and 6–16 and table 3–4 and troubleshoot circuitry associated with transistors 1A4Q3 and 1A4Q6.

(*e*) Disconnect 1P16 from 1A4J16 and connect AN/USM–306 to junction of resistor 1A4R32 and 1A4J16.

(*f*) At TS–2664/GRM–90, set FUNCTION switch at AM and key unit. Output indication should be —4db±18db. If proper indication is not obtained, refer to figures 3–18 and 6–16 and table 3–4 and troubleshoot circuitry associated with transistor 1A4Q7.

b. Alignment.

(1) *Initial Setup and Checks.*

(*a*) Connect test equipment as shown in figure 3–17 and energize.

(*b*) At TS–2664/GRM–90, set FREQUENCY KILOCYCLES controls at 2555 kHz and FUNCTION switch at CW.

(2) *646.5 kHz Filter Alignment.*

(*a*) At frequency mixer 1A4, disconnect 1P12 and 1P15 from 1A4J12 and 1A4J15, respectively (fig. 3–18).

(*b*) Tune AN/USM–306 to 646.5 MHz and connect AN/USM–306 probe to the emitter of transistor 1A4Q4 (use foil side of board). Fine tune AN/USM–306 for a peak.

(*c*) At frequency mixer 1A4, adjust capacitor 1A4C3 and transformer 1A4T1 (fig. 3–18), for peak indication on AN/USM–306.

(*d*) At TS–2664/GRM–90, rotate 10 kHz FREQUENCY KILOCYCLES control from 0 to 9. Observe that AN/USM–306 indicates —18db ±24db at all positions. Set 10 kHz FREQUENCY KILOCYCLES control at 5.

NOTE

If the output indication is not symmetrical around position 5 of the 10 kHz FREQUENCY KILOCYCLES control, adjust transformer 1A2T3 (located on TS–2664/GRM–90 synthesizer 1A2 assembly) for a peak indication on the AN/USM–306. Rotate 10 kHz FREQUENCY KILOCYCLES control from 0 to 9, checking symmetry and output voltage level.

(*e*) At frequency mixer 1A4, reconnect 1P12 and 1P15 to 1A4J12 and 1A4J15, respectively. Disconnect AN/USM–306.

(3) *1.1015 MHz Filter and Oscillator Alignment.*

(*a*) At frequency mixer 1A4, disconnect 1P13 and 1P14 from 1A4J13 and 1A4J14, respectively.

(*b*) Tune AN/USM–306 to 1.1015 MHz and connect AN/USM–306 probe to the collector of transistor 1A4Q4 (use foil side of board). Fine tune AN/USM–306 for a peak.

(*c*) At frequency mixer 1A4, adjust capacitor 1A4C11 (fig. 3–18), for peak indication on AN/USM–306.

(*d*) At TS–2664/GRM–90, rotate 1 kHz FREQUENCY KILOCYCLES control from 0 to 9. Observe that AN/USM–306 indication stays within the range of —14db to —24db at all positions. Set the 1 kHz FREQUENCY KILOCYCLES control at 5.

NOTE

If the output indication is not symmetrical around position 5 of the 1 kHz FREQUENCY KILOCYCLES control, set control at 5 and adjust transformer 1A2T4 (located on TS–2664/GRM–90 synthesizer 1A2 assembly) for a peak indication on AN/USM–306. Rotate 1 kHz FREQUENCY KILOCYCLES control from 0 to 9, checking output voltage and symmetry. Set control at 5.

(*e*) At TS–2664/GRM–90, pull out 1 kHz FREQUENCY KILOCYCLES control to energize the 1.1015 MHz oscillator.

(*f*) At frequency mixer 1A4, rotate tuning slug of transformer 1A4T4 (fig. 3–18), counterclockwise until oscillation stops. Then rotate tuning slug clockwise until oscillation starts and rotate one additional turn clockwise. AN/USM–306 indication should be —18db±14db. Push in 1 kHz FREQUENCY KILOCYCLES control and disconnect AN/USM–306. Reconnect 1P13 and 1P14 to 1A4J13 and 1A4J14, respectively.

(4) *455 kHz Filter Alignment.*

(*a*) Tune AN/USM–306 to 455 kHz and connect AN/USM–306 probe to 1A4J17. Fine tune AN/USM–306 for a peak.

(*b*) At frequency mixer 1A4, adjust capacitors 1A4C25, 1A4C26, and transformer 1A4T2 (fig. 3–18), for a peak.

(*c*) At TS–2664/GRM–90, rotate the 1 kHz and 10 kHz FREQUENCY KILOCYCLES controls from 0 to 9. Observe that AN/USM–306 indication stays within the range of —14db to —9db. At TS–2664/GRM–90, set FUNCTION switch at AM and observe that AN/USM–306 indication drops to 0. Set both 1 kHz and 10 kHz FREQUENCY KILOCYCLES controls at 5 and disconnect AN/USM–306.

(*d*) At frequency mixer 1A4, disconnect 1P16 from 1A4J16 and connect AN/USM–306 probe to 1A4J16 (fig. 3–18).

(*e*) Key TS–2664/GRM–90 and adjust transformer 1A4T3 for a peak indication on AN/USM–306 that is within the range of 4db±15db. Unkey TS–2664/GRM–90 and disconnect all equipment.

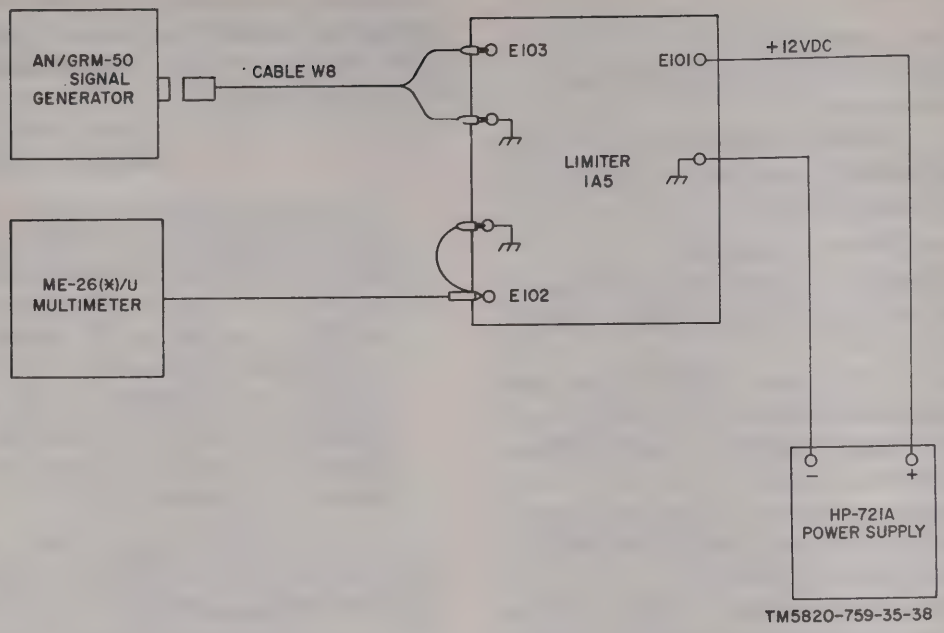


Figure 3–19. Limiter 1A5 test setup.

3–11. Limiter 1A5

The troubleshooting procedures for limiter 1A5 are outlined below. After the faulty component has been isolated, refer to paragraph 3–3 for general repair instructions. Because alignment procedures are not required for limiter 1A5, repeat the troubleshooting steps after replacing the faulty component to check for proper operation.

a. Connect all equipment as shown in figure 3–9 and turn power on.

b. At AN/GRM–50 rf signal generator, set controls to produce a cw output signal at 2.0 MHz and set output level to obtain a 3.0 volt indication on the ME–26(*)/U.

c. Sweep AN/GRM–50 frequency from 2 to 15 MHz and observe that ME–26(*)/U indication does not drop to 0.

d. Turn off HP–721A power supply.

e. At AN/GRM–50, set output level to obtain a 5.0 volt indication on the ME–26(*)/U.

f. Turn on HP–721A and observe that ME–26(*)/U indication immediately drops to 0 and remains at 0 as AN/GRM–50 frequency is swept from 2 to 15 MHz. If proper indications are not obtained, refer to figures 3–20 and 1–5 and table 3–5 and troubleshoot limiter 1A5 circuitry.

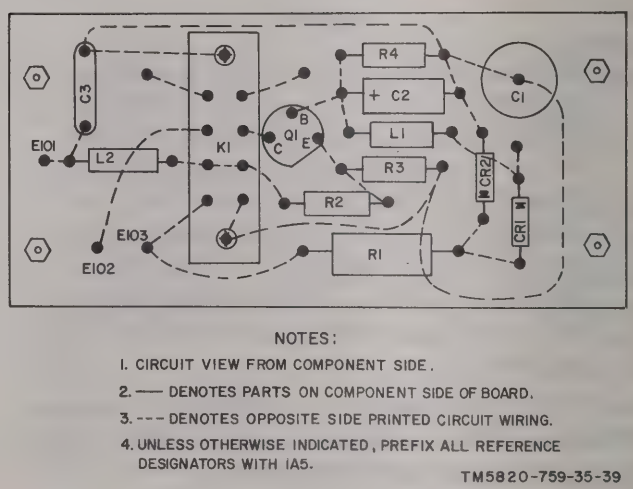


Figure 3–20. Limiter 1A5 component locations and printed wiring.

3–12. Translator 1A6

The troubleshooting and alignment procedures necessary for translator 1A6 are outlined in the following paragraphs. After the faulty component has been isolated by performing the troubleshooting procedures in *a* below refer to paragraph 3–3 for general repair instructions and to *b* below for the necessary alignment procedures.

a. Troubleshooting. To troubleshoot translator 1A6, perform the following procedures:

CAUTION

Do not key TS–2664/GRM–90 unless directed to do so.

Table 3–5. Limiter 1A5 DC Voltages

Stage	Emitter	Base	Collector
Q1[a]	0.66 v	0.66 v	12 v
Q1[b]	0.66 v	0.66 v	6 v

a No rf signal at 1A5E103.
b Six volts, 1.5 MHz at 1A5E103.

(1) *Initial Setup and Checks.*

(*a*) Connect all equipment as shown in figure 3–21 and turn power on.

(*b*) At AN/GRM–50, set controls to produce a 2.505 MHz cw output signal at 50 mv. Check AN/GRM–50 frequency with AN/USM–207; adjust if necessary. Connect AN/GRM–50 rf output to TS–2664/GRM–90 ANTENNA connector 1J4.

(*c*) At TS–2664/GRM–90, set FREQUENCY KILOCYCLES controls at 2505 kHz, RF GAIN control fully clockwise, PRESELECTOR control at 2.5 MHz, and FUNCTION switch at US.B

(*d*) Tune AN/USM–306 to 2.505 MHz and connect probe to anode of diode 1A6CR1 (fig. 3–22 and 6–17). Tune AN/USM–306 for a peak at 2.505 MHz.

(*e*) At TS–2664/GRM–90, adjust PRESELECTOR control for peak indication on the AN/USM–306.

(*f*) At AN/GRM–50, decrease output level to obtain a —29db±3db indication on the AN/USM–306. Disconnect the AN/USM–306.

(2) *17.748 MHz Filter.*

NOTE

Before proceeding with the following steps, perform the procedures in (1) above if not already completed.

(*a*) At translator 1A6, disconnect 1P7 and 1P9 from 1A6J7 and 1A6J9, respectively (fig. 3–22).

(*b*) Connect AN/USM–306 probe to the cathode of diode 1A6CR7 (fig. 3–22 and 6–17). Tune AN/USM–306 for a peak at 17.748 MHz.

(*c*) The indication observed on the AN/USM–306 should be at least —44db±5db. Disconnect the AN/USM–306 probe. If a proper indica-

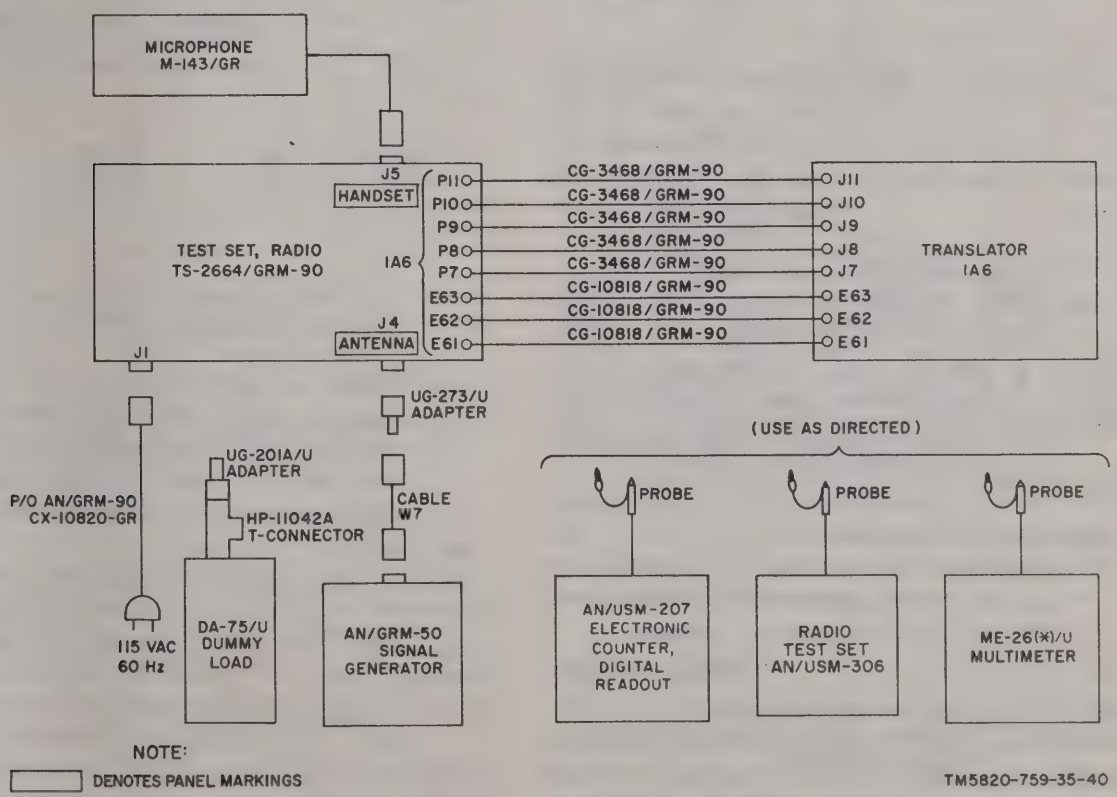
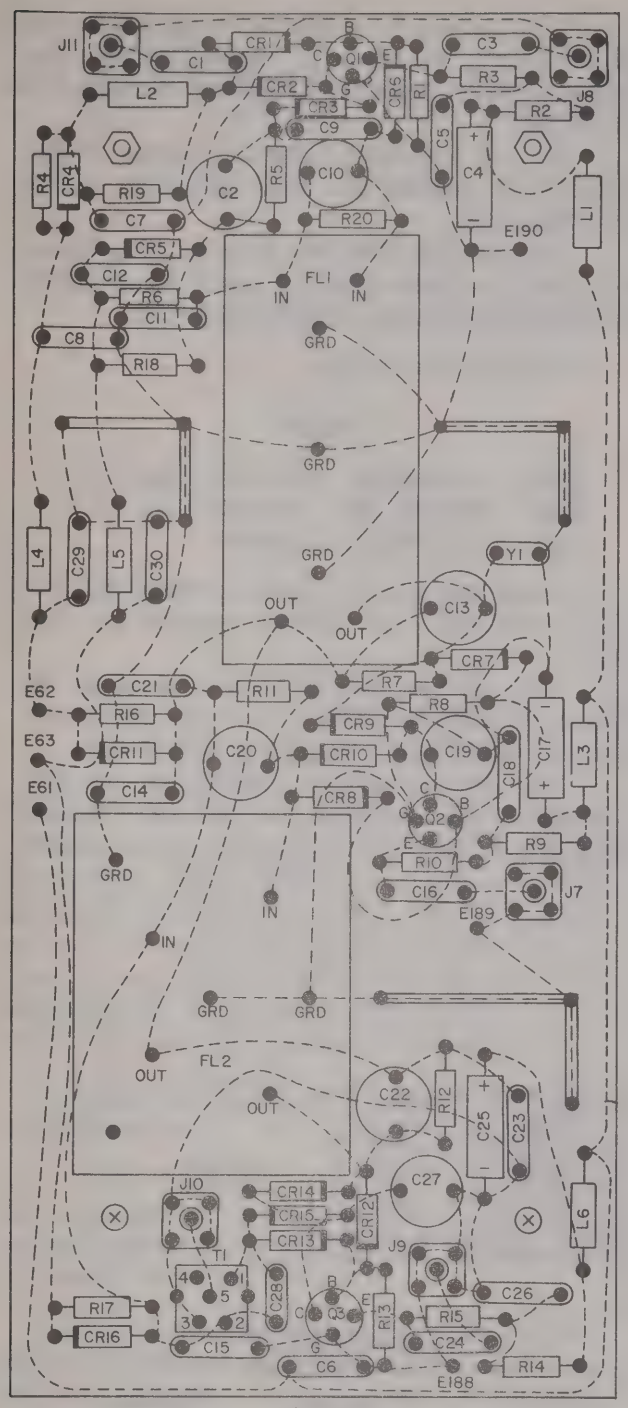


Figure 3–21. Translator 1A6 test setup.



NOTES:

1. CIRCUIT VIEW FROM COMPONENT SIDE.
2. ——— DENOTES PARTS ON COMPONENT SIDE OF BOARD.
3. - - - - DENOTES OPPOSITE SIDE PRINTED CIRCUIT WIRING.
4. UNLESS OTHERWISE INDICATED, PREFIX ALL REFERENCE DESIGNATORS WITH 1A6.

TM5820-759-35-41

Figure 3-22. Translator 1A6 component locations and printed wiring.

tion is not obtained, refer to figures 3–22 and 6–17 and table 3–6 and troubleshoot circuitry associated with transistor 1A6Q1 and filter 1A6FL1.

(3) *11.1515 MHz Filter.*

NOTE

Before proceeding with the following steps, perform the procedures in (1) and (2) above if not already completed.

(*a*) Connect 1P7 to 1A6J7.

(*b*) Tune AN/USM–306 to 11.1515 MHz and connect probe to cathode of diode 1A6CR12 (fig. 3–22). Fine tune AN/USM–306 for peak indication.

(*c*) The indication observed on the AN/USM–306 should be at least —38db±5db. Disconnect AN/USM–306 probe. If proper indication is not obtained, refer to figures 3–22 and 6–17 and table 3–6 and troubleshoot circuitry associated with transistor 1A6Q2 and filter 1A6FL2.

(4) *455 kHz Mixer.*

NOTE

Before proceeding with the following steps, perform the procedures in (1) above if not already completed.

Table 3–6. Translator 1A6 DC Voltages

Stage	Emitter	Base	Collector
Q1	6.3 v	6.0 v	1.5 v
Q2	6.4 v	6.2 v	0.75 v
Q3	6.5 v	6.2 v	0.62 v

NOTES

1. All voltage readings in table above taken with ME–26(*)/U.
2. Unless otherwise noted, all voltage readings taken with TS–2664/GRM–90 FREQUENCY KILOCYCLES controls set at 2.555 MHz, FUNCTION switch set at CW, receive mode.

(*a*) At translator 1A6, insure that 1P10 is connected to 1A6J10 and connect 1P9 to 1A6J9.

(*b*) Tune AN/USM–306 to 455 kHz and connect probe to 1A6J10 at foil side of board. Fine tune AN/USM–306 for peak indication.

(*c*) The indication observed on AN/USM–306 should be at least —8db±10db. Disconnect AN/USM–306 probe. If proper indication is not obtained, refer to figures 3–22 and 6–17 and

table 3–6 and troubleshoot circuitry associated with transistor 1A6Q3.

b. Alignment.

CAUTION

Do not key TS–2664/GRM–90 until directed to do so.

(1) *Initial Setup and Checks.*

(*a*) Connect test equipment as shown in figure 3–21 and turn power on.

(*b*) Set AN/GRM–50 controls to produce an output at 2.505 MHz, cw at —24db±5db. Check frequency on AN/USM–207; adjust if necessary. Connect AN/GRM–50 RF OUT connector to TS–2664/GRM–90 ANTENNA connector 1J4.

(*c*) At TS–2664/GRM–90, set controls as follows:

FREQUENCY KILOCYCLES	2050 kHz
RF GAIN	fully clockwise
PRESELECTOR	2.5 MHz
FUNCTION	USB

(*d*) Connect AN/USM–306 probe to anode of diode 1A6CR1 (fig. 3–22). Tune AN/USM–306 for a peak at 2.505 MHz. Repeak indication using PRESELECTOR control on TS–2664/GRM–90.

(*e*) At AN/GRM–50, decrease output level to obtain a AN/USM–306 indication of —29db ±5db. Disconnect AN/USM–306.

(2) *Receive Mode Alignment.*

NOTE

Before proceeding with the following steps (*a*) and (*b*) below, perform the procedures in (1) above if not already completed.

(*a*) *17.748 MHz Filter Alignment.*

1. At translator 1A6, disconnect 1P7 and 1P9 from 1A6J7 and 1A6J9, respectively.

2. Tune AN/USM–306 to 17.748 MHz and connect AN/USM–306 probe to cathode of diode 1A6CR7, figure 3–22. Fine tune AN/USM–306 for peak indication.

3. At translator 1A6, adjust capacitors 1A6C2 and 1A6C13 for maximum AN/USM–306 indication. The indicated output level should exceed —44db±5db.

4. Disconnect AN/USM–306. Reconnect 1P7 to 1A6J7.

(*b*) *11.1515 MHz Filter Alignment.*

NOTE

Perform step (*a*) above before proceeding with the following procedures.

1. Tune AN/USM–306 to 11.1515 MHz and connect AN/USM–306 probe to the cathode of diode 1A6CR12. Fine tune AN/USM–306 for peak indication.

2. At translator 1A6, adjust capacitors 1A6C19 and 1A6C22 for maximum AN/USM–306 indication. The indicated output level should exceed —38db±5db.

3. Reconnect 1P9 to 1A6J9 and disconnect AN/USM–306.

(*c*) *455 kHz Mixer Alignment.*

NOTE

Perform steps (*a*) and (*b*) above before proceeding with the following alignment procedures.

1. At translator 1A6, insure that 1P10 is connected to 1A6J10.

2. Tune AN/USM–306 to 455 kHz and connect AN/USM–306 probe to 1A6J10 at foil side of the board. Fine tune AN/USM–306 for peak indication.

3. At translator 1A6, adjust transformer 1A6T1 for maximum AN/USM–306 indication.

(3) *Transmit Mode Alignment.*

NOTE

Perform steps (1) and (2) above before proceeding with this alignment procedure.

(*a*) At TS–2664/GRM–90, disconnect AN/GRM–50 from ANTENNA connector J4 and connect Dummy Load DA–75/U with HP–11042A T-connector to ANTENNA connector J4. Connect ME–26(*)/U ac probe to the HP–11042A T-connector.

(*b*) With TS–2664/GRM–90 FREQUENCY KILOCYCLES controls set at 2555 kHz in the cw mode, key the unit and adjust PRESELECTOR and PA TUNE controls to obtain peak indication on the ME–26(*)/U. Adjust TRANSMIT AUDIO control to set the output power at 50 watts. Unkey TS–2664/GRM–90.

(*c*) Key TS–2664/GRM–90 and adjust transformer 1A6T1, capacitors 1A6C27, 1A6C20, and 1A6C10 for peak indication on the ME–26(*)/U. Unkey the TS–2664/GRM–90 and disconnect all equipment.

3–13. If. Amplifier 1A7

The troubleshooting and alignment procedures necessary for if. amplifier 1A7 are outlined in the following paragraphs. After the faulty component has been isolated by performing the troubleshooting procedures in *a* below, refer to paragraph 3–3

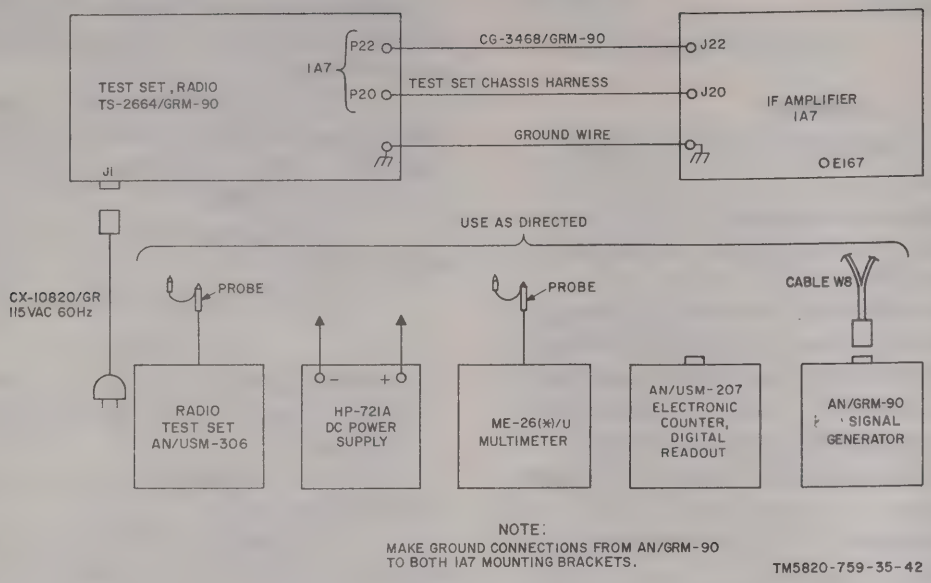


Figure 3-23. If. amplifier 1A7 test setup.

for general repair instructions and to *b* below for the necessary alignment procedures.

a. Troubleshooting. To troubleshoot if. amplifier 1A7, perform the following procedures:

(1) *Initial Setup and Checks.*

(*a*) Connect equipment as shown in figure 3-23 and turn power on.

(*b*) At TS-2664/GRM-90, set FUNCTION switch at CW, FREQUENCY KILOCYCLES controls at 2555 kHz, and NOISE LIMITER at OFF. Rotate RF GAIN control fully clockwise.

(*c*) At AN/GRM-50, set controls to produce a 455 kHz, cw output signal. Check frequency on AN/USM-207 and adjust if necessary. Set AN/GRM-50 attenuator at —70 dbm and connect AN/GRM-50 to terminal 1A7E167.

(*d*) Connect AN/USM-306 probe to terminal 1A7E167 and tune to 455 kHz. Adjust AN/GRM-50 output level control to obtain a —80db±10db indication on the AN/USM-306.

(2) *Receive if.*

NOTE

Perform step (1) above before proceeding with the following.

(*a*) Connect the AN/USM-306 to signal side of 1A7L1.

(*b*) The indicated output level should be —28±7db.

(*c*) If the proper indication is not obtained in (*b*) above, refer to figure 3-24 and 6-18 and table 3-7 and troubleshoot stages 1A7Q1 through 1A7Q5.

(3) *Receive Agc.*

(*a*) Perform step (1) and step (2)(*a*) and (*b*) above.

(*b*) Set AN/GRM-50 step attenuator at —70 dbm. Record AN/USM-306 indication in db's.

(*c*) Set AN/GRM-50 step attenuator to —10 dbm. Record AN/USM-306 indication.

(*d*) The value of step (*c*) above must be 14 db higher than the value recorded in step (*b*) above.

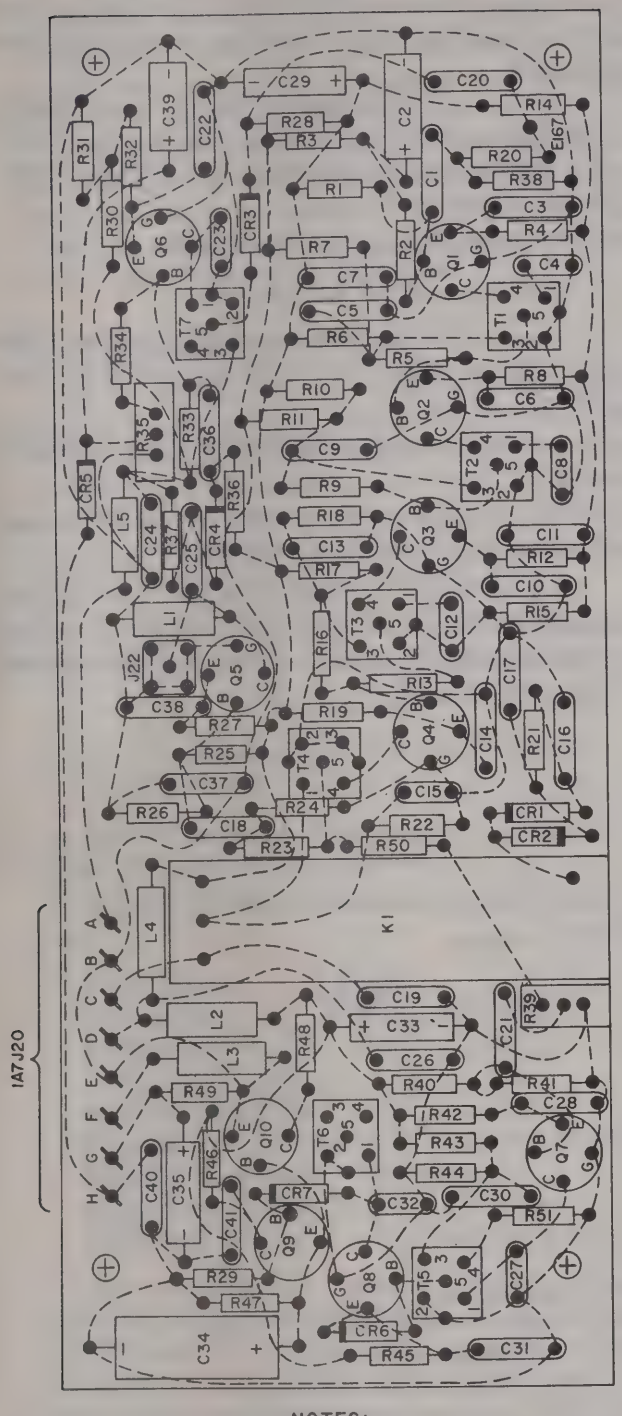
(*e*) At TS-2664/GRM-90, set NOISE LIMITER switch at ON and observe a slight decrease in the indication on the AN/USM-306.

(4) *Transmit If.*

(*a*) At TS-2664/GRM-90, remove limiter 1A14.

(*b*) At if. amplifier 1A7, tack solder a 390 ohm resistor between terminal 1A7E167 and ground. Connect AN/USM-306 probe to anode of diode 1A7CR4.

(*c*) Key TS-2664/GRM-90 and adjust TRANSMIT AUDIO control to obtain a —15db ±5db indication on the AN/USM-306. Unkey TS-2664/GRM-90.



NOTES:

1. CIRCUIT VIEW FROM COMPONENT SIDE.
2. ——— DENOTES PARTS ON COMPONENT SIDE OF BOARD.
3. – – – – DENOTES OPPOSITE SIDE, PRINTED CIRCUIT WIRING.
4. UNLESS OTHERWISE INDICATED, PREFIX ALL REFERENCE DESIGNATORS WITH 1A7.

TM5820-759-35-43

Figure 3–24. If. amplifier 1A7 component locations and printed wiring.

Table 3–7. If Amplifier 1A7 DC Voltages

Stage	Emitter	Base	Collector
Q1	7.5 v	7.2 v	0.0 v
Q2	7.6 v	7.4 v	0.0 v
Q3	6.3 v	6.0 v	0.0 v
Q4	5.8 v	5.5 v	0.0 v
Q5	5.5 v	5.2 v	0.06 v
Q6	0.0 v	0.0 v	0.0 v
Q7	10.0 v	9.7 v	0.0 v
Q8	10.8 v	10.6 v	0.0 v
Q9	0.0 v	0.0 v	11.5 v
Q10	0.30 v	0.0 v	11.5 v

NOTES

1. All voltage readings in table above taken with ME–26(*)/U.
2. Unless otherwise noted, all voltage readings taken with TS–2664/GRM–90 FREQUENCY KILOCYCLES controls set at 2555 kHz, FUNCTION switch set at CW, receive mode.

(*d*) At if. amplifier 1A7, connect AN/USM–306 probe to terminal 1A7E167. Key TS2664/GRM–90. The AN/USM–306 should indicate a —36db±10db. If proper indication is not obtained, refer to figures 3–24 and 6–18 and table 3–7 and troubleshoot circuitry associated with transistor 1A7Q6.

b. Alignment.

(1) *Initial Setups and Checks.*

(*a*) Connect test equipment as shown in figure 3–23 and turn power on.

(*b*) At TS–2664/GRM–90, set controls as follows:

FREQUENCY KILOCYCLES	2555 kHz
FUNCTION	CW
NOISE LIMITER	OFF
RF GAIN	fully clockwise

(2) *Receive If. Alignment.*

(*a*) Set AN/GRM–50 controls to produce a 455 kHz, cw output. Check frequency on AN/USM–207. Set AN/GRM–50 attenuator at —70 dbm and connect rf output to if. amplifier 1A7 terminal E167.

(*b*) Connect AN/USM–306 probe to terminal 1A7E167 and tune for a peak at 455 kHz.

(*c*) Adjust AN/GRM–50 output level control to obtain a —80db±10db indication on the AN/USM–306.

(*d*) Connect AN/USM–306 to signal side of 1A7L1 (fig. 3–24).

(*e*) At if. amplifier 1A7, adjust transformers 1A7T1, 1A7T2, 1A7T3, and 1A7T4 for peak indication on AN/USM–306. The indicated voltage on the AN/USM–306 should be —28db±10db.

(3) *Receive Agc Alignment.*

NOTE

Perform step (2) above before proceeding with this alignment procedure.

(*a*) At if. amplifier 1A7, rotate resistor 1A7R39 (fig. 3–24), to the counterclockwise stop (if manufactured by Daystrom) or to the clockwise stop (if manufactured by Borg).

(*b*) At AN/GRM–50, set attenuator at —10 dbm.

(*c*) At if. amplifier 1A7, adjust transformers 1A7T5 and 1A7T6 for a null.

(*d*) Rotate resistor 1A7R39 to the opposite stop as in step (*a*) above.

(*e*) At AN/GRM–50, set attenuator at —70 dbm and record AN/USM–306 indication in db's.

(*f*) At AN/GRM–50, set attenuator at —10 dbm.

(*g*) At if. amplifier 1A7, adjust resistor 1A7R39 to obtain a AN/USM–306 indication that is 14 db higher than indication recorded in step (*e*) above.

(*h*) At TS–2664/GRM–90, set NOISE LIMITER switch at ON and observe that AN/USM–306 indication decreases. Set NOISE LIMITER switch at OFF.

(*i*) Disconnect AN/GRM–50.

(4) *Transmit If. Alignment.*

(*a*) At if. amplifier 1A7, tack solder a 390 ohm resistor between terminal 1A7E167 and ground.

(*b*) At TS–2664/GRM–90, remove limiter 1A14.

(*c*) Tune AN/USM–306 to 455 kHz and connect probe to anode of 1A7CR4.

(*d*) Key TS–2664/GRM–90 and adjust TRANSMIT AUDIO control to obtain a —15db ±5db indication on the AN/USM–306. Unkey TS–2664/GRM–90.

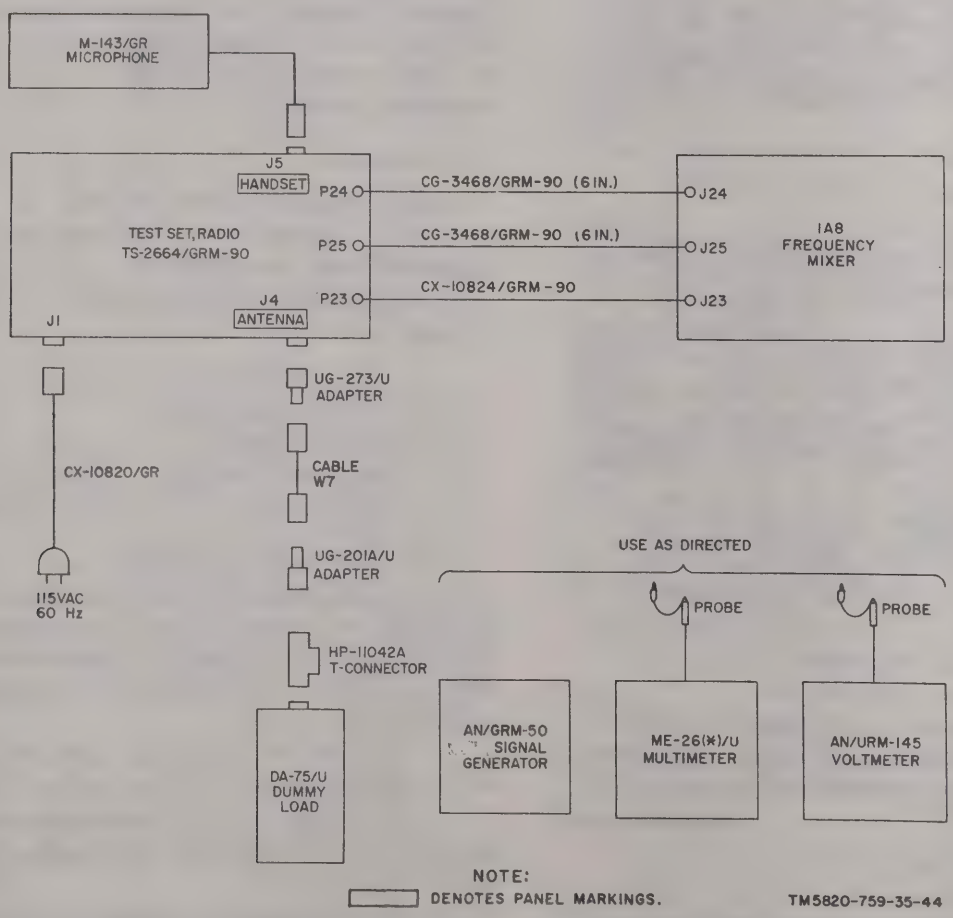


Figure 3–25. Frequency mixer 1A8 test setup.

(*e*) At if. amplifier 1A7, connect AN/USM–306 probe to terminal 1A7E167. Key TS–2664/GRM–90 and adjust transformer 1A7T7 tuning slug for peak indication on the AN/USM–306. Unkey TS–2664/GRM–90.

(*f*) Key TS2664/GRM–90 and adjust variable resistor 1A7R35 until AN/USM–306 indication just starts to decrease. Unkey TS–2664/GRM–90 and disconnect all equipment. Reinstall limiter 1A14 at TS–2664/GRM–90.

3–14. Frequency Mixer 1A8

The troubleshooting and alignment procedures necessary for frequency mixer 1A8 are outlined in the following paragraphs. After the faulty component has been isolated by performing the troubleshooting procedures in *a* below refer to paragraph 3–3 for general repair instructions and to *b* below for the necessary alignment procedures.

a. Troubleshooting. To troubleshoot frequency mixer 1A8, perform the following procedures:

CAUTION

Do not key TS–2664/GRM–90 unless directed to do so.

(1) Connect test equipment as shown in figure 3–25 and turn power on.

(2) At TS–2664/GRM–90, set controls as follows:

FUNCTION	AM
RF GAIN	fully clockwise
FREQUENCY KILOCYCLES	3103 kHz
NOISE LIMITER	OFF
TRANSMIT AUDIO	fully counterclockwise
RECEIVE AUDIO	mid-range
SPEAKER SWITCH	ON
PRESELECTOR	fully counterclockwise

(3) Temporarily remove Dummy Load DA–75/U from TS–2664/GRM–90 and connect AN/GRM–50 to ANTENNA connector. Tune AN/GRM–50 for a 3.103 MHz output signal at 100 uv, modulated 30 percent with a 1 kHz tone.

(4) Tune TS–2664/GRM–90 PRESELECTOR control for maximum front panel meter indication. Repeak using AN/GRM–50 frequency control.

(5) At frequency mixer 1A8, connect AN/URM–145 ac probe to negative terminal of 1A8C32.

(6) The AN/URM–145 should indicate 15±7 mv.

(7) If the proper indication was not obtained for step (6) above, refer to figures 3–26 and 6–19 and table 3–8 and troubleshoot stage 1A8Q3 and 1A8CR4.

(8) At TS–2664/GRM–90, set FUNCTION switch at LSB. Set AN/GRM–50 for cw output and adjust frequency control for a peak indication on the TS–2664/GRM–90 front panel meter.

(9) The AN/URM–145 should indicate 15 ±7 mv.

Table 3–8. Frequency Mixer 1A8 DC Voltages

Stage	Emitter	Base	Collector
Q3[a]	3.0 v	2.7 v	0.0 v
Q3[b]	0.0 v	0.0 v	0.0 v
Q4[a]	0.0 v	9.7 v	0.0 v
Q4[b]	9.6 v	9.7 v	3.1 v
Q5[a]	6.7 v	7.0 v	3.8 v
Q5[b]	6.7 v	7.0 v	3.8 v
Q6[a]	13.2 v	13.4 v	0.0 v
Q6[b]	0.0 v	13.0 v	0.0 v
Q7[a]	8.3 v	8.2 v	4.0 v
Q7[b]	0.0 v	0.0 v	0.0 v
Q8[a]	4.2 v	4.0 v	0.0 v
Q8[b]	0.0 v	0.0 v	0.0 v
Q9[a]	2.8 v	2.1 v	0.0 v
Q9[b]	2.8 v	2.1 v	0.0 v
Q10[a]	5.7 v	5.0 v	0.0 v
Q10[b]	0.70 v	6.9 v	0.0 v

NOTES

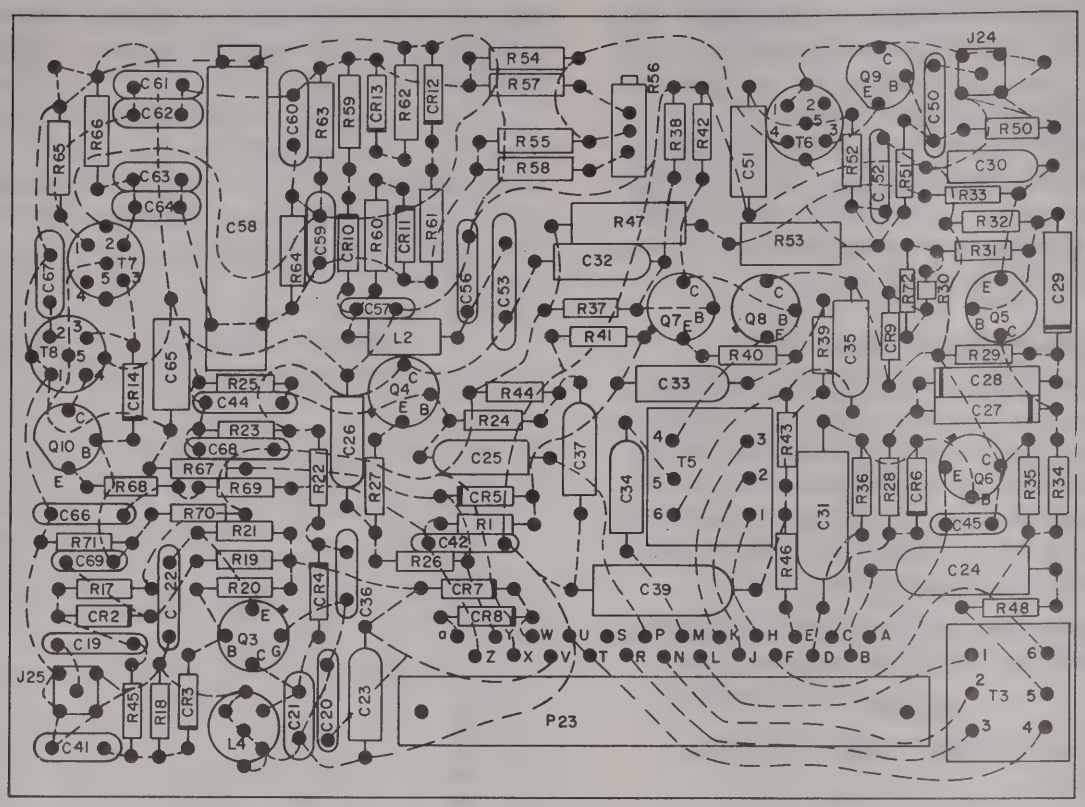
1. All voltage readings in table above taken with ME–26(*)/U.
2. Unless otherwise noted, all voltage readings taken with TS–2664/GRM–90 FREQUENCY KILOCYCLES controls set at 2555 kHz, FUNCTION switch at CW, receive mode.

[a] Am. receive mode.
[b] Am. transmit mode.

(10) If the proper indication was not obtained for step (9) above, refer to figures 3–26 and 6–19 and table 3–8 and troubleshoot stages 1A8Q10, 1A8Q9, and the diode ring modulator/detector (1A8CR11–1A8CR13).

(11) At TS–2664/GRM–90, disconnect AN/GRM–50 and connect DA–75/U dummy load. Set FUNCTION switch at CW.

(12) At frequency mixer 1A8, connect the AN/URM–145 ac probe to terminal B of 1A8J23 and key the TS–2664/GRM–90. The indicated output should be 125 ±25 mv. Unkey TS–2664/GRM–90. If proper indication is not obtained, refer to figures 3–26 and 6–19 and table 3–8 and troubleshoot the circuitry associated with transistor 1A8Q5 and transformer 1A8T3.



NOTES:

1. CIRCUIT VIEW FROM COMPONENT SIDE.
2. — DENOTES PARTS ON COMPONENT SIDE OF BOARD.
3. -- DENOTES OPPOSITE SIDE PRINTED CIRCUIT WIRING.
4. UNLESS OTHERWISE INDICATED, PREFIX ALL REFERENCE DESIGNATORS WITH 1A8.

TM5820-759-35-45

Figure 3–26. Frequency mixer 1A8 component locations and printed wiring.

(13) At frequency mixer 1A8, connect the AN/URM–145 ac probe and ground lead across pins L and R of 1A8J23 and key the TS–2664/GRM–90. The indicated output should be 125 ±25 mv. Unkey the TS–2664/GRM–90. If a proper indication is not obtained, refer to figures 3–26 and 6–19 and table 3–8 and troubleshoot the circuitry associated with transistor 1A8Q5 and transformer 1A8T3.

(14) At frequency mixer 1A8, connect the AN/URM–145 ac probe to the negative terminal of 1A8C32 and key the TS–2664/GRM–90. The indicated output should be 700 ±150 mv. Unkey TS–2664/GRM–90. If proper indication is not obtained, refer to figures 3–26 and 6–19 and table 3–8 and troubleshoot the circuitry associated with transistor 1A8Q4.

(15) At frequency mixer 1A8, connect AN/URM–145 ac probe and ground lead across pins H and K of 1A8J23. Key the TS–2664/GRM–90. The indicated output should be greater than 3 Vac. Unkey TS–2664/GRM–90. If a proper indication is not obtained, refer to figure 3–26 and 6–19 and table 3–8 and troubleshoot the circuitry associated with transistors 1A8Q7 and 1A8Q8.

(16) At frequency mixer 1A8, connect the AN/URM–145 probe to the anode of diode 1A8CR2 (fig. 3–26), and set TRANSMIT AUDIO fully clockwise. Key the TS–2664/GRM–90. The indicated output should be 15 ±7 mv. Unkey TS–2664/GRM–90. If a proper indication is not obtained, refer to figures 3–26 and 6–19 and table 3–8 and troubleshoot the circuitry associated with transistor 1A8Q9 and transformers 1A8T6 and 1A8T7.

(17) Key the TS–2664/GRM–90 several times in the CW mode and observe that the key relay is delayed approximately one-half second after the key is released. Repeat the procedure in the am., lsb, and usb modes and observe that the key relay releases instantaneously with the key. If a proper indication is not obtained, refer to fig-

ures 3–26 and 6–19 and table 3–8 and troubleshoot the circuitry associated with transistor 1A8Q6.

b. Alignment

(1) Connect test equipment as shown in figure 3–25 and turn power on.

(2) At TS–2664/GRM–90, set controls as follows:

FUNCTION	CW
FR GAIN	fully clockwise
FREQUENCY	
KILOCYCLES	3103 kHz
NOISE LIMITER	OFF
TRANSMIT	fully counterclock-
AUDIO	wise
RECEIVE	
AUDIO	mid-range
SPEAKER	
SWITCH	ON
PRESELECTOR	fully counterclock-
	wise

(3) At Dummy Load DA–75/U, connect ME–26A/U to the T-connector.

(4) Key TS–2664/GRM–90 and adjust TRANSMIT AUDIO control for 50 watts output. Unkey TS–2664/GRM–90.

(5) Key TS–2664/GRM–90 and adjust transformer 1A8T7 (fig. 3–26), for a peak ME–26A/U indication. Unkey TS–2664/GRM–90.

(6) At TS–2664/GRM–90, set FUNCTION switch at USB.

(7) Key TS–2664/GRM–90 and alternately adjust resistor 1A8R56 and capacitor 1A8C58 to obtain a null in the output indication on the ME–26(*)/U until no interaction is observed between the adjustments. Unkey TS–2664/GRM–90.

(8) Disconnect Dummy Load DA–75/U from TS–2664/GRM–90 ANTENNA connector J4 and connect rf signal generator AN/GRM–50 to ANTENNA connector J4. Tune AN/GRM–50 for a peak (monitored on front panel speaker) at 3.103 MHz. Connect ME–26(*)/U ac probe to ungrounded terminal on front panel speaker terminals.

(9) At frequency mixer 1A8, adjust transformer 1A8T8 for peak indication on ME–26(*)/U.

(10) At TS–2664/GRM–90, set FUNCTION switch at AM.

(11) At AN/GRM–50, set controls to produce a 1000 Hz, 30 percent modulated output. Fine tune frequency control for a peak indication an ME–26(*)/U.

(12) At frequency mixer 1A8, adjust coil 1A8L4 for a peak indication on ME–26(*)/U. Disconnect all test equipment.

3–15. Rf Oscillator 1A9

The troubleshooting and alignment procedures necessary for rf oscillator 1A9 are outlined in the following paragraphs. After a faulty component has been isolated by performing the troubleshooting procedures in *a* below, refer to paragraph 3–3 for general repair instructions and to *b* below for the necessary alignment procedures.

a. Troubleshooting. To troubleshoot rf oscillator 1A9, perform the following procedures:

(1) Connect test equipment as shown in figure 3–27 and turn power on.

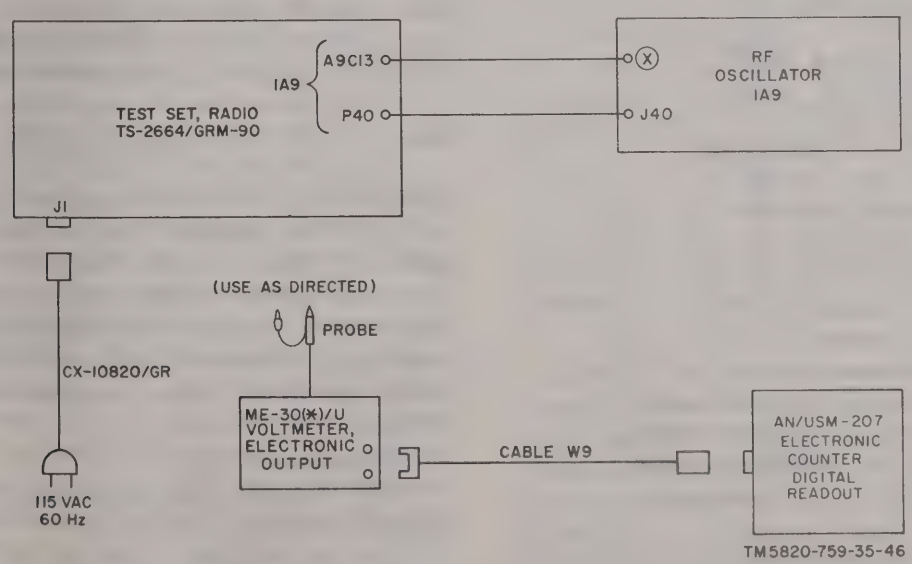


Figure 3–27. Rf oscillator 1A9 test setup.

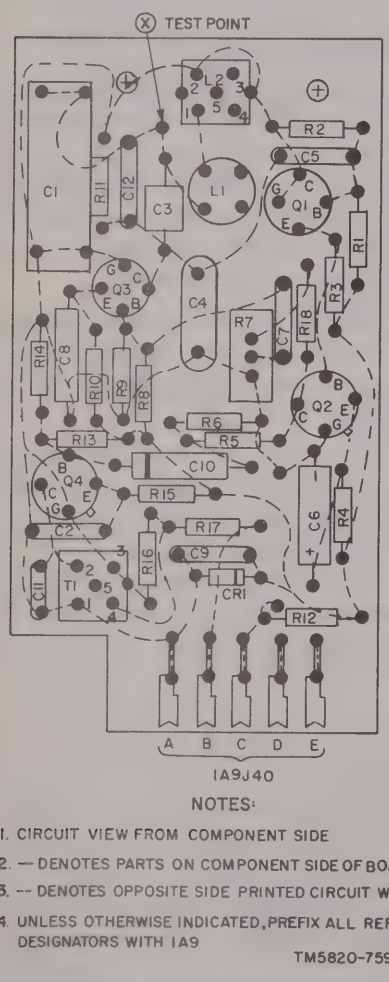
(2) At TS–2664/GRM–90, set FUNCTION switch at USB and FREQUENCY KILOCYCLES controls at 2555 kHz. Pull out 1 kHz FREQUENCY KILOCYCLES control to energize rf oscillator 1A9.

(3) At TS–2664/GRM–90 frequency mixer 1A3 assembly, disconnect 1P42 from 1A3J42.

(4) At rf oscillator 1A9, connect ME–30(*)/U probe to the junction of resistor 1A9R11 and collector of transistor 1A9Q3 (fig. 3–28).

(5) The indicated output should be 37 ±2 mv on the ME–30(*)/U. Disconnect ME–30(*)/U. If proper indication is not obtained, refer to figures 3–28 and 1–6 and table 3–9 and troubleshoot circuitry associated with transistors 1A9Q1 through 1A9Q3.

(6) At TS–2664/GRM–90 frequency mixer 1A3 assembly, connect probe of ME–30(*)/U to the junction of resistor 1A3R19 and emitter of transistor 1A3Q4.



NOTES:

1. CIRCUIT VIEW FROM COMPONENT SIDE
2. — DENOTES PARTS ON COMPONENT SIDE OF BOARD
3. -- DENOTES OPPOSITE SIDE PRINTED CIRCUIT WIRING
4. UNLESS OTHERWISE INDICATED, PREFIX ALL REFERENCE DESIGNATORS WITH 1A9

TM5820-759-35-47

Figure 3–28. Rf oscillator 1A9 component locations and printed wiring.

Table 3–9. RF Oscillator 1A9 DC Voltages

Stage	Emitter	Base	Collector
Q1	3.9 v	3.6 v	0.0 v
Q2	4.1 v	3.9 v	1.8 v
Q3	6.1 v	5.9 v	0.10 v
Q4	6.0 v	5.8 v	0.0 v

NOTES

1. All voltage readings in table above taken with ME–26(*)/U.
2. Unless otherwise noted, all voltage readings taken with TS–2664/GRM–90 FREQUENCY KILOCYCLES controls set at 2.555 MHz, FUNCTION switch at CW, receive mode with 1 kHz FREQUENCY KILOCYCLES control pulled out.

(7) The indicated output should be 100 ±50 mv. Disconnect ME–30(*)/U. If proper indication is not obtained, refer to figures 3–28 and 1–6 and table 3–9 and troubleshoot circuitry associated with transistor 1A9Q4.

(8) Remove rf oscillator 1A9 from the CX–10827/GRM–90 cable. Install rf oscillator 1A9 in the TS–2664/GRM–90.

(9) At TS–2664/GRM–90 frequency mixer 1A3 assembly, connect probe of ME–30(*)/U to the junction of resistor 1A3R19 and emitter of transistor 1A3Q4.

(10) At TS–2664/GRM–90, set 1 kHz FREQUENCY KILOCYCLES control exactly at 5.

(11) The indicated output should be 793.500 kHz ±100 Hz on the AN/USM–207.

(12) At TS–2664/GRM–90, set 1 kHz FREQUENCY KILOCYCLES control exactly at 0.

(13) The indicated output should be 798.500 kHz ±100 Hz on the AN/USM–207.

(14) At TS–2664/GRM–90, set 1 kHz FREQUENCY KILOCYCLES control exactly at 10.

(15) The indicated output should be 788.500 kHz ±100 Hz on the AN/USM–207.

(16) If proper indications are not obtained in steps (11), (13), and (15) above, refer to figures 3–28 and 1–6 and table 3–9 and troubleshoot circuitry associated with transistors 1A9Q1 and 1A9Q2.

b. Alignment.

(1) Connect test equipment as shown in figure 3–27 and turn power on.

(2) At TS–2664/GRM–90, set FUNCTION switch at USB and FREQUENCY KILOCYCLES controls at 2555 kHz.

(3) At TS–2664/GRM–90 frequency mixer 1A3 assembly, disconnect 1P42 from 1A3J42. Connect ME–30(*)/U to the emitter of transistor 1A3Q2, and pull out the 1 kHz FREQUENCY KILOCYCLES control to energize rf oscillator 1A9 (fig. 3–29).

(4) At rf oscillator 1A9, adjust transformer 1A9T1 (fig. 3–28), for peak indication on the ME–30(*)/U. The voltage indication should be 100 ±50 mv.

(5) At rf oscillator 1A9, connect ME–30(*)/U to the junction of resistor 1A9R11 and capacitor 1A9C12 (fig. 3–28). Adjust resistor 1A9R11 to obtain ME–30(*)/U indication of 37 ±2 mv.

(6) Remove rf oscillator 1A9 from the CX–10827/GRM–90 cable and install it in TS–2664/GRM–90. Reconnect ME–30(*)/U to the emitter of transistor 1A3Q2.

(7) At TS–2664/GRM–90, set 1 kHz FREQUENCY KILOCYCLES control exactly at 5.

(8) At rf oscillator 1A9, adjust coil 1A9L1 (use Delevan 9668 alignment tool) to obtain an AN/USM–207 indication of 793.500 kHz ±100 Hz.

(9) At TS–2664/GRM–90, set 1 kHz FREQUENCY KILOCYCLES control exactly at 0.

(10) At rf oscillator 1A9, adjust capacitor 1A9C1 to obtain an AN/USM–207 indication of 798.500 kHz ±100 Hz.

(11) At TS–2664/GRM–90, set 1 kHz FREQUENCY KILOCYCLES control exactly at 10.

(12) At rf oscillator 1A9, adjust coil 1A9L2 to obtain an AN/USM–207 indication of 788.500 kHz ±100 Hz.

(13) Disconnect all equipment. Remove rf oscillator 1A9 from TS–2664/GRM–90 and install the original rf oscillator 1A9 assembly.

3–16. Rf Oscillator 1A10

The troubleshooting, disassembly, reassembly, and alignment procedures necessary for rf oscillator 1A10 are outlined in the following paragraphs. Perform the troubleshooting procedures in *a* below to isolate the faulty component or subassembly. After the faulty component has been isolated, refer to *b* below to disassemble the unit and to paragraph 3–3 for general repair instructions. After the faulty component has been replaced, use the procedures of *c* below to reassemble the unit and *d* below for the necessary alignment procedures.

a. Troubleshooting. To troubleshoot rf oscillator 1A10, perform the following procedures:

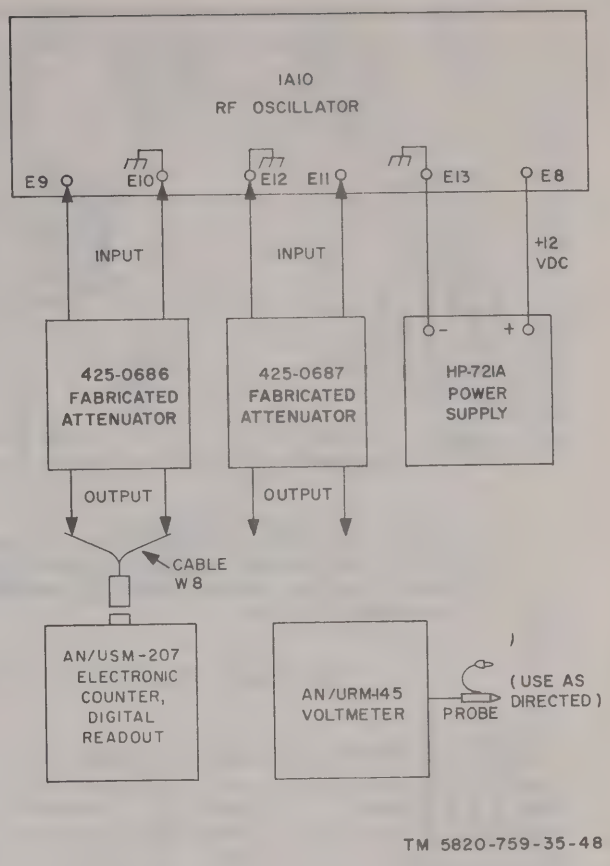


Figure 3–29. Rf oscillator 1A10 test setup.

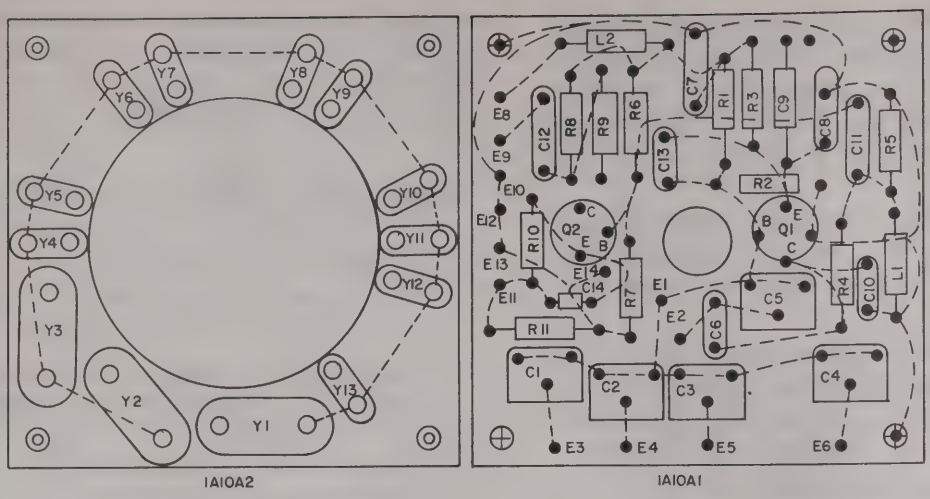
(1) Connect all equipment as shown in figure 3–29 and energize. Set HP–721A power supply output voltage at ±12 Vdc.

(2) Connect AN/URM–145 probe to terminal 1A10E9. The voltage indicated on the AN/URM–145 should be 50 ±25 mvac for all positions of switch 1A10A2S1.

(3) Connect AN/URM–145 probe to terminal 1A10E11. The voltage indicated on the AN/URM–145 should be 100±35 mvac at all positions of switch 1A10A2S1.

(4) If proper indications are not obtained in steps (2) and (3) above, refer to figures 3–30 and 1–7 and table 3–10 and troubleshoot circuitry associated with transistor 1A10A1Q2.

(5) At rf oscillator 1A10, rotate switch 1A10A2S1 through all positions. Record frequency indicated on AN/USM–207 to eight significant figures. Compare recorded frequencies with those shown in table 3–11. If frequency is out of tolerance, refer to alignment procedures in *d* below to obtain proper indication. If proper indication is not obtained, refer to figures 3–30 and 1–7 and table 3–10 and troubleshoot circuitry associated with transistor 1A10A1Q1.



NOTES:
1. CIRCUITS VIEWED FROM COMPONENT SIDE.
2. —— DENOTES PARTS ON COMPONENT SIDE OF BOARD.
3. ---- DENOTES OPPOSITE SIDE PRINTED CIRCUIT WIRING.
4. UNLESS OTHERWISE INDICATED, PREFIX ALL REFERENCE DESIGNATORS WITH 1A10.

TM5820-759-35-49

Figure 3–30. Rf oscillator 1A10 component locations and printed wiring.

Table 3–10. RF Oscillator 1A10 DC Voltages

Stage	Emitter	Base	Collector
Q1	6.3 v	5.9 v	2.3 v
Q2	4.8 v	5.5 v	10.8 v

NOTE

All voltage readings in table above taken with ME–26(*)/U.

Table 3–11. RF Oscillator 1A10 Output Frequencies

Switch position from full counterclockwise position	Frequency MHz	Tolerance Hz	Adjust
1	3.247	±162	C5
2	4.247	±050	C4
3	5.247	±262	C5
4	6.247	±050	C3
5	7.247	±362	C5
6	8.247	±050	C2
7	9.247	±050	C1
8	10.247	±512	C5
9	11.247	±562	C5
10	12.247	±612	C5
11	13.247	±662	C5
12	14.247	±712	C5
13	15.247	±762	C5

b. Disassembly (fig. 3–31). To disassemble rf oscillator 1A10, proceed as follows:

(1) At rear of rf oscillator 1A10, loosen setscrews (2, 4) and remove rigid shaft coupling (1) and extension shaft (3).

(2) At subassembly 1A10A1 (13), remove screws (5, 6, 7), lockwashers (8, 10), flatwashers (9), angle brackets (11), and sleeve spacers (12). Tag and unsolder wires from subassembly 1A10A1 (13) terminals E1 through E7 and E14 and remove subassembly 1A10A1 (13).

(3) At subassembly 1A10A2 (14), tag and unsolder crystal leads from switch wafer (16). Remove sleeve spacer (15) and subassembly 1A10A2 (14).

(4) At switch mounting plate (21), remove screws (17), lockwashers (18), flatwashers (19), and sleeve spacers (20).

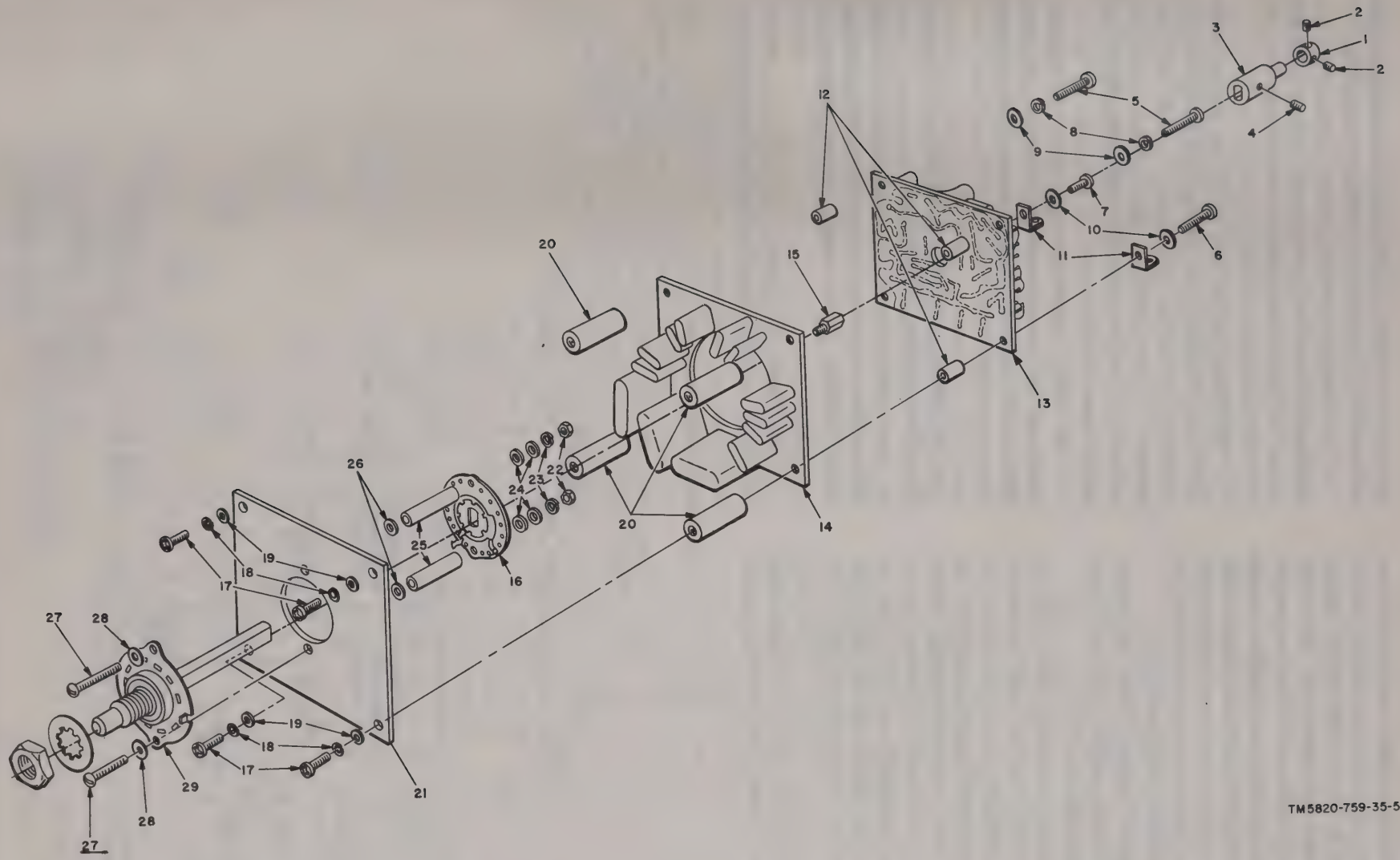
(5) At switch wafer (16), remove nuts (22), lockwashers (23), fiber flatwashers (24), switch wafer (16), sleeve spacers (25), fiber flatwashers (26), screws (27), flatwashers (28), and remove switch detent/shaft assembly (29) from switch mounting plate (21).

c. Assembly (fig. 3–31). To assemble rf oscillator, proceed as follows:

(1) At switch detent/shaft assembly (29), rotate switch shaft fully clockwise, viewed from control knob end, and place switch detent/shaft assembly (29) on switch mounting plate (21) and align mounting holes. Insert screws (27) with flatwashers (28) in mounting holes.

(2) At other side of switch mounting plate (21), place fiber washers (26) and sleeve spacers (25) on screws (27).

(3) At switch wafer (16), rotate switch rotor clockwise, viewed from control knob end, so that



1 Rigid shaft coupling
2 Setscrew
3 Extension shaft
4 Setscrew
5 Screw
6 Screw
7 Screw
8 Lockwasher
9 Flatwasher
10 Lockwasher
11 Angle bracket
12 Sleeve spacer
13 Subassembly 1A10A1
14 Subassembly 1A10A2
15 Sleeve spacer
16 Switch wafer
17 Screw
18 Lockwasher
19 Flatwasher
20 Sleeve spacer
21 Switch mounting plate
22 Nut
23 Lockwasher
24 Fiber flatwasher
25 Sleeve spacer
26 Fiber flatwasher
27 Screw
28 Flatwasher
29 Switch detent/shaft assembly

Figure 3–31. Rf oscillator 1A10 exploded view.

small rotor terminal is in contact with switch terminal located next to wiper. Position switch mounting plate (21) so that index tab on switch detent/shaft assembly (29) is on right hand side, viewed from control knob end. Position switch wafer (16) so that large rotor terminal is towards control knob with the two terminal lugs at the bottom. Slide switch wafer (16) onto switch shaft and screws (27), and secure using fiber flatwashers (24), lockwashers (23), and nut (22).

(4) Secure sleeve spacers (20) to switch mounting plate (21) using screws (17) with lockwashers (18) and flatwashers (19).

(5) Position switch mounting plate (21) so that index tab on switch detent/shaft assembly (29) is on right hand side, viewed from control knob end. Place subassembly 1A10A2 (14) on sleeve spacers (20), with crystals towards switch mounting plate (21) and break in printed circuit at bottom. Secure subassembly 1A10A2 (14) to sleeve spacers (20) with sleeve spacer (15). Solder crystal leads to the adjacent switch wafer (16) terminals.

(6) At printed circuit side of subassembly 1A10A1 (13), solder wires from switch wafer (16) to terminals E1 through E8 and E14. Slide subassembly 1A10A1 (13) over switch shaft.

(7) Insert screw (7) with lockwasher (10) and angle bracket (11) in hole adjacent to terminal 1A10A1E6 and secure subassembly 1A10A1 (13) to sleeve spacer (15).

(8) Insert screw (6) with lockwasher (10) and angle bracket (11) through hole adjacent to terminal 1A10A1E3 and sleeve spacer (11) and secure to sleeve spacer (20). Install remaining screws (5), lockwashers (8), flatwashers (9), and sleeve spacers (12).

(9) Slide extension shaft (3) onto switch shaft and tighten setscrews (4). Slide rigid shaft coupling (1) onto extension shaft (3) and tighten setscrews (2).

d. Alignment. To align rf oscillator 1A10, perform the following procedures:

(1) Connect test equipment and fabricated attenuators as shown in figure 3–29 and energize. Set HP–721A power supply output voltage at +12 Vdc.

(2) Refer to table 3–11 and set switch 1A10A2S1 at each position and adjust the asso-

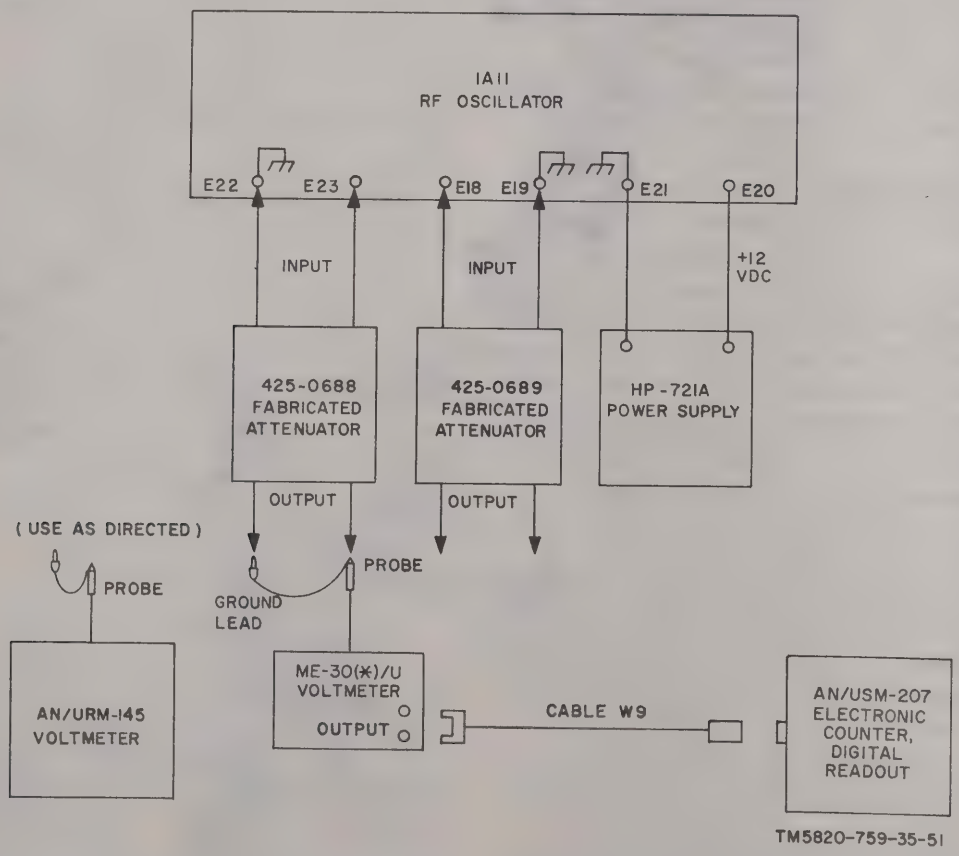


Figure 3–32. Rf oscillator 1A11 test setup.

ciated capacitor (fig. 3–30), to obtain the correct frequency indication on the AN/USM–207.

(3) Connect the AN/URM–145 probe to terminal 1A10E9. The voltage indication should be 50 ±25 mvac for each switch position.

(4) Connect the AN/URM–145 probe to terminal 1A10E11. The voltage indication should be 100 ±35 mvac for each switch position. Disconnect all equipment.

3–17. Rf Oscillator 1A11

The troubleshooting, disassembly, reassembly, and alignment procedures necessary for rf oscillator 1A11 are outlined in the following paragraphs. Perform the troubleshooting procedures in *a* below to isolate the faulty component or subassembly. After the faulty component has been isolated, refer to *b* below to disassemble the unit and to paragraph 3–3 for general repair instructions. After the faulty component has been replaced, proceed to *c* below to reassemble the unit and to *d* below for the necessary alignment procedures.

a. Troubleshooting. To troubleshoot rf oscillator 1A11, perform the following procedures:

(1) Connect test equipment as shown in figure 3–32 and turn power on. Set HP–721A power supply output voltage at ±12 Vdc.

(2) Connect AN/URM–145 probe to terminal 1A11A1E18. The voltage indicated on AN/URM–145 should be 34 ±7 mvac for all positions of switch 1A11A2S1. Disconnect AN/URM–145.

(3) Connect AN/URM–145 probe to terminal 1A11A1E23. The voltage indicated on AN/URM–145 should be 88 ±18 mvac for all positions of switch 1A11A2S1. Disconnect AN/URM–145. If proper indications are not obtained in steps (2) and (3) above, refer to figures 3–33 and 1–8 and table 3–12 and troubleshoot circuitry associated with transistor 1A11A1Q2.

Table 3–12. RF Oscillator 1A11 DC Voltages

Stage	Emitter	Base	Collector
Q1	5.8 v	6.3 v	2.5 v
Q2	4.7 v	5.5 v	9.7 v

NOTE

All voltage readings in table above taken with ME–26(*)/U.

Table 3–13. RF Oscillator 1A11 Output Frequencies

Switch position from full counterclockwise position	Frequency MHz	Tolerance Hz
1	7.047	±352
2	6.947	±347
3	6.847	±342
4	6.747	±337
5	6.647	±332
6	6.547	±327
7	6.447	±322
8	6.347	±317
9	6.247	±312
10	6.147	±307

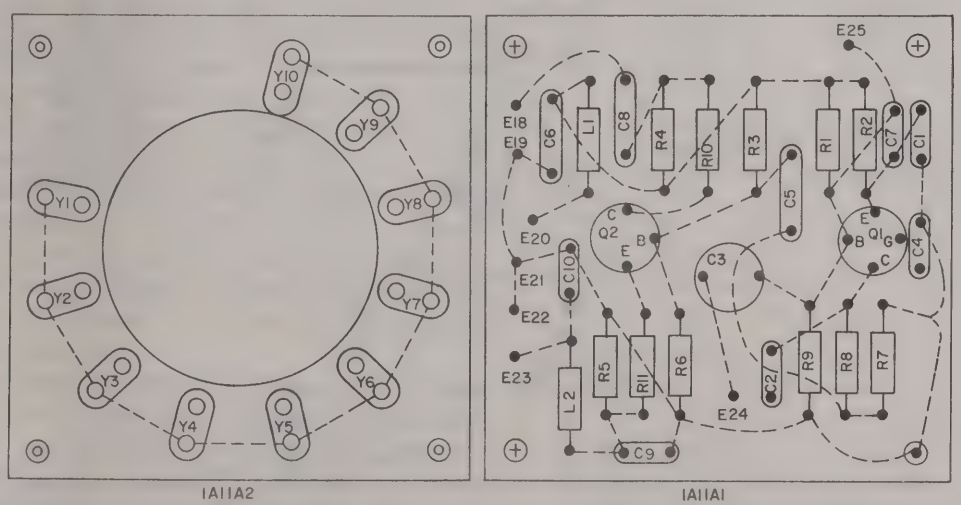
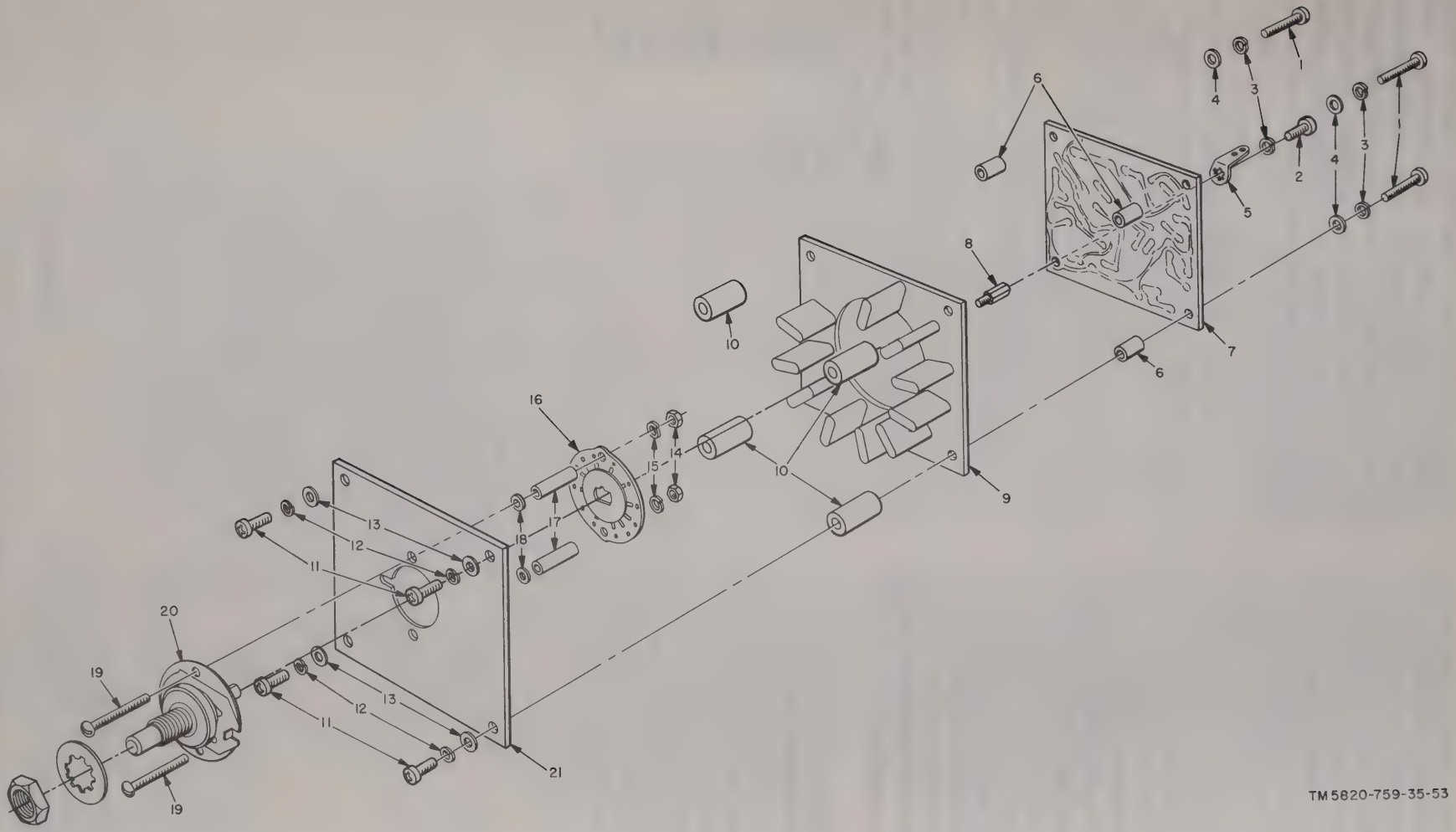


Figure 3–33. Rf oscillator 1A11 component locations and printed wiring.



1 Screw
2 Screw
3 Lockwasher
4 Flatwasher
5 Terminal lug
6 Sleeve spacer
7 Subassembly 1A11A1
8 Sleeve spacer
9 Subassembly 1A11A2
10 Sleeve spacer
11 Screw
12 Lockwasher
13 Flatwasher
14 Nut
15 Lockwasher
16 Switch wafer
17 Sleeve spacer
18 Fiber flatwasher
19 Screw
20 Switch detent/shaft assembly
21 Switch mounting plate

Figure 3–34. Rf oscillator 1A11 exploded view.

(4) Measure and record frequency indication at each position of switch 1A11A2S1. The frequencies should be as shown in table 3–13. If frequency is out of tolerance, refer to alignment procedures in *d* below to obtain proper indication. If proper indications are not obtained, check crystal associated with switch position producing erroneous indication. If crystal is good, refer to figuers 3–33 and 1–8 and table 3–12 and troubleshoot circuitry associated with transistor 1A11A1Q1.

b. Disassembly (fig. 3–34). To disassemble rf oscillator 1A11, proceed as follows:

(1) At rear of rf oscillator 1A11, remove screws (1, 2), lockwashers (3), flatwashers (4), terminal lug (5), and sleeve spacers (6). Tag and unsolder wires from terminals 1A11A1E24 and 1A11A1E25 and remove subassembly 1A11A1(7).

(2) At subassembly 1A11A2 (9), unsolder crystal leads from switch wafer (16) terminals. Remove sleeve spacer (8) and subassembly 1A11A2 (9).

(3) At switch mounting plate (21), remove screws (11), lockwashers (12), flatwashers (13), and sleeve spacers (10).

(4) At switch wafer (16), remove nuts (14), lockwashers (15), switch wafer (16), sleeve spacers (17), fiber flatwashers (18), and screws (19). Remove switch detent/shaft assembly (20) from switch mounting plate (21).

c. Assembly (fig. 3–34). To assemble rf oscillator 1A11, proceed as follows:

(1) Place switch detent/shaft assembly (20) on switch mounting plate (21) so that detent ball is in switch mounting plate (21) notch and orient so that notch is on left hand side, viewed from control knob end. Rotate switch shaft fully counterclockwise. Install screws (19), fiber flatwashers (18), and sleeve spacers (17).

(2) Position switch wafer (16) rotor so that notch in shaft hole is pointing towards wiper. Place switch wafer (16) on screws (19) and switch shaft with wiper at top. Secure switch wafer (16) to screws (19) using lockwashers (15) and nuts (14).

(3) At switch mounting plate (21), install screws (11), lockwashers (12), flatwashers (13) and sleeve spacers (10). Place subassembly 1A11A2 (9) on sleeve spacers (10) so that crystals are towards switch mounting plate (21) and break in printed circuit is at upper left hand corner, viewed from control knob end. Secure subassembly 1A11A2 (9) to sleeve spacers (10) with sleeve spacer (8) and solder crystal leads to adjacent switch wafer (16) terminals.

(4) Solder wires, from subassembly 1A11A2 (9), to terminals E24 and E25 on subassembly 1A11A1 (7). Secure subassembly 1A11A1 (7) to sleeve spacer (8) using screw (2) with terminal lug (5) and lockwasher (3). Install remaining sleeve spacers (6), screws (1), lockwashers (3), and flatwashers (4).

d. Alignment. To align rf oscillator 1A11, perform the following procedures:

(1) Connect test equipment and fabricated attenuators as shown in figure 3–30 and turn power on. Set HP–721A power supply output voltage at +12 Vdc.

(2) Referring to table 3–13, set switch 1A11A2S1 at each position and adjust capacitor 1A11A1C3 (fig. 3–33), as required to obtain correct frequency indication.

(3) Connect AN/URM–145 probe to terminal 1A11A1E23. The voltage indication should be 88 ±18 mvac for each switch position.

(4) Connect AN/URM–145 probe to terminal 1A11A1E18. The voltage indication should be 34 ±7 mvac. Disconnect all equipment.

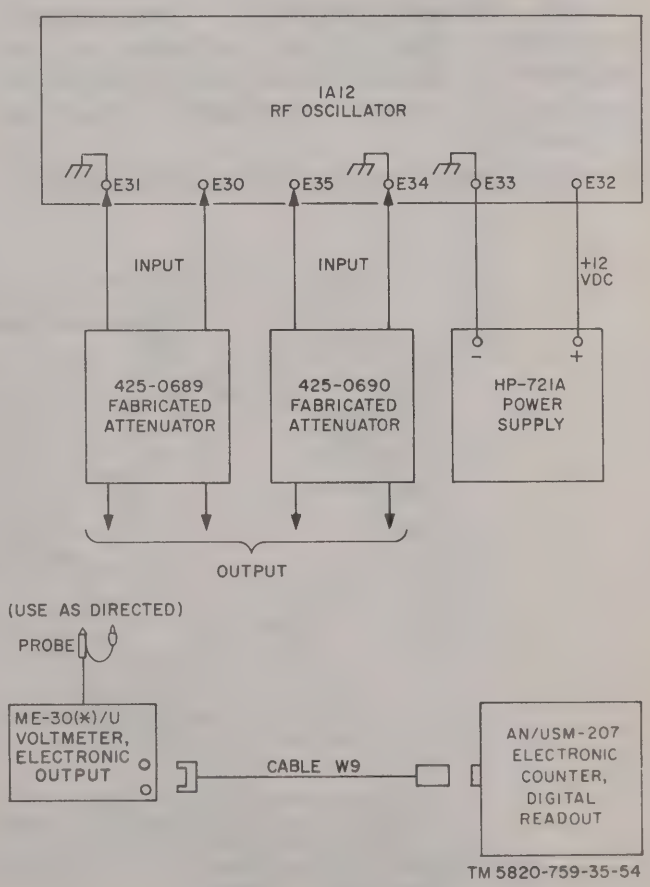


Figure 3–35. Rf oscillator 1A12 test setup.

3–18. Rf Oscillator 1A12

The troubleshooting, disassembly, and reassembly procedures necessary for rf oscillator 1A12 are outlined in the following paragraphs. Perform the troubleshooting procedures in *a* below to isolate the faulty component. After the faulty component has been isolated, refer to *b* below to disassemble the unit and to paragraph 3–3 for general repair instructions. After the faulty component has been replaced, use the procedures of *c* below to reassemble the unit. Because there are no alignment procedures, repeat the troubleshooting steps after repairing the unit to check for proper operation.

a. Troubleshooting. To troubleshoot rf oscillator 1A12, perform the following procedures:

(1) Connect test equipment as shown in figure 3–35 and turn power on. Set HP–721A power supply output voltage at +12 Vdc.

(2) Connect ME–30(*)/U to terminal 1A12A1E30. The voltage indicated on the ME–30(*)/U should be 70 ±14 mvac for all positions of switch 1A12A2S1. Disconnect ME–30(*)/U.

(3) Connect ME–30(*)/U to terminal 1A12A1E35. The voltage indicated on the ME–30(*)/U should be 6.35 ±0.65 mvac for all positions of switch 1A12A2S1. Disconnect ME–30(*)/U.

(4) If proper indications are not obtained in steps (2) and (3) above, refer to figures 3–36 and 1–9 and table 3–14 and troubleshoot circuitry associated with transistor 1A12A1Q2.

Table 3–14. RF Oscillator 1A12 Voltages

Stage	Emitter	Base	Collector
Q1	10.5 v	10.7 v	2.3 v
Q2	2.1 v	2.2 v	7.7 v

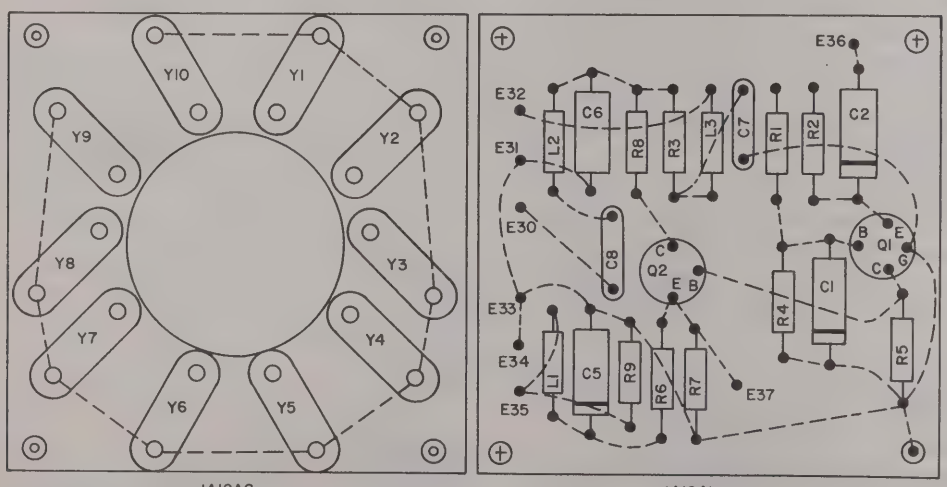
NOTE

All voltage readings in table above taken with ME–26(*)/U.

Table 3–15. RF Oscillator 1A12 Output Frequencies

Switch position from full counterclockwise position	Frequency MHz	Tolerance Hz
1	1.756	±87.8
2	1.766	±88.3
3	1.776	±88.8
4	1.786	±89.3
5	1.796	±89.8
6	1.806	±90.3
7	1.816	±90.8
8	1.826	±91.3
9	1.836	±91.8
10	1.846	±92.3

(5) Measure and record frequency indication at each position of switch 1A12A2S1. The frequencies should be as shown in table 3–15. If frequency is out of tolerance, refer to figures 3–36 and 1–9 and table 3–14 and troubleshoot circuitry



NOTES:
1. CIRCUITS VIEWED FROM COMPONENT SIDE.
2. —— DENOTES PARTS ON COMPONENT SIDE OF BOARD.
3. - - - - DENOTES OPPOSITE SIDE PRINTED CIRCUIT WIRING.
4. UNLESS OTHERWISE INDICATED, PREFIX ALL REFERENCE DESIGNATORS WITH 1A12.

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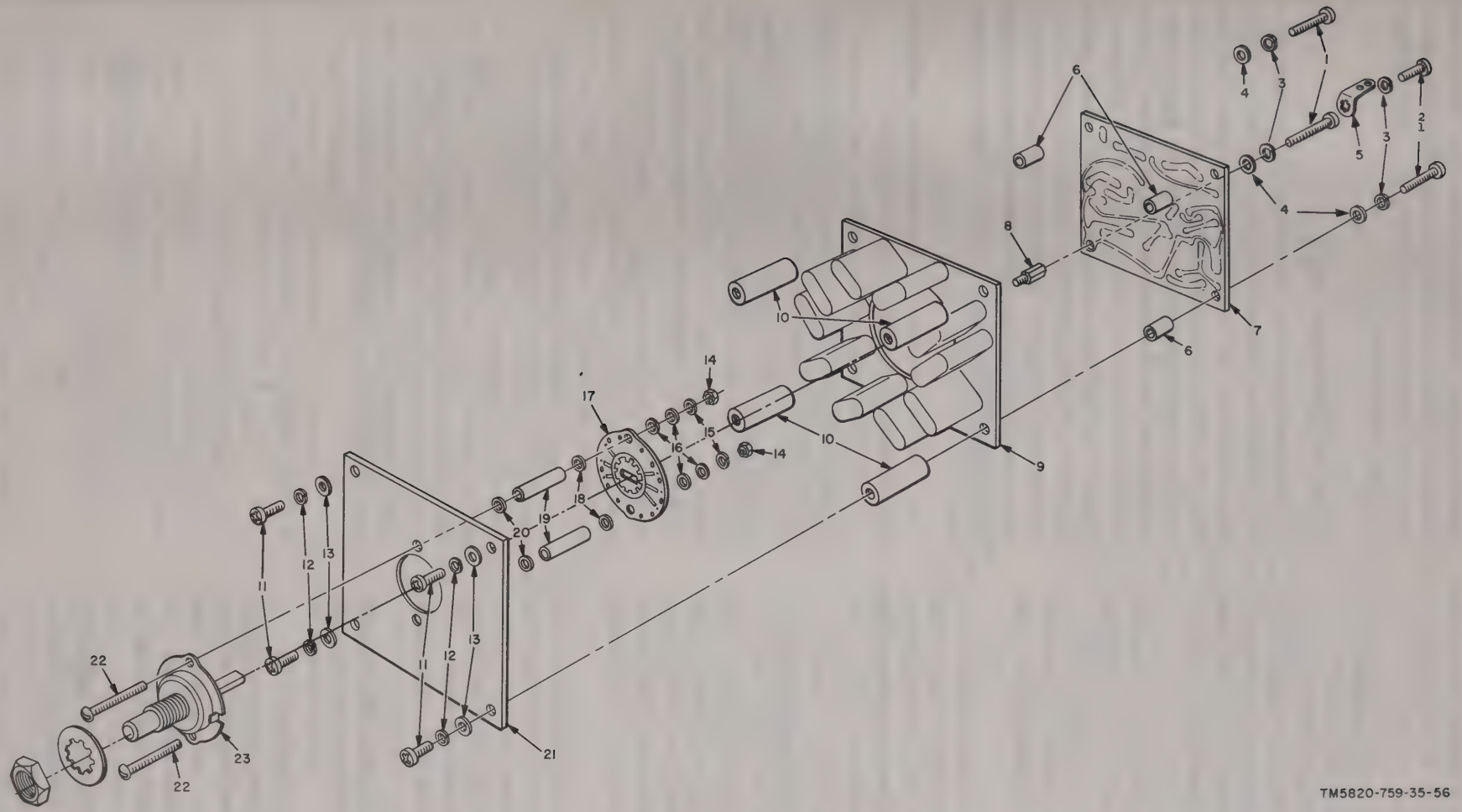
Figure 3–36. Rf oscillator 1A12 component locations and printed wiring.



1 Screw
2 Screw
3 Lockwasher
4 Flatwasher
5 Terminal lug
6 Sleeve spacer
7 Subassembly 1A12A1
8 Sleeve spacer
9 Subassembly 1A12A2
10 Sleeve spacer
11 Screw
12 Lockwasher
13 Flatwasher
14 Nut
15 Lockwasher
16 Fiber flatwasher
17 Switch wafer
18 Fiber flatwasher
19 Sleeve spacer
20 Fiber flatwasher
21 Switch mounting plate
22 Screw
23 Switch detent/shaft assembly

Figure 3–37. Rf oscillator 1A12 exploded view.

associated with transistor 1A12A1Q2. Also check crystal associated with switch producing erroneous indication.

b. Disassembly (fig. 3–37). To disassemble rf oscillator 1A12, proceed as follows:

(1) At rear of rf oscillator 1A12, remove screws (1, 2), lockwashers (3), flatwashers (4), terminal lug (5), and sleeve spacers (6). Tag and unsolder wires from terminals 1A12A1E36 and 1A12A1E37 and remove subassembly 1A12A1 (7).

(2) At subassembly 1A12A2 (9), unsolder crystal leads from switch wafer (17). Remove sleeve spacer (8) and subassembly 1A12A2 (9).

(3) At switch mounting plate (21), remove spacers (10), screws (11), lockwashers (12), and flatwashers (13).

(4) At switch wafer (17), remove nuts (14), lockwashers (15), fiber flatwashers (16), switch wafer (17), fiber flatwashers (18), sleeve spacers (19), fiber flatwashers (20). Remove screws (22) and switch detent/shaft assembly (23) from switch mounting plate (21).

c. Assembly (fig. 3–37). To assemble rf oscillator 1A12, proceed as follows:

(1) Place switch detent/shaft assembly (23) on switch mounting plate (21) with locating tab on right hand side, viewed from control knob end. Install screws (22), fiber flatwashers (20), sleeve spacers (19), and fiber flatwashers (18). Rotate switch shaft fully clockwise.

(2) Position switch wafer (17) rotor so that rotor terminal is in contact with stationary terminal next to stationary wiper terminal. Place switch wafer (17) on screws (19) with stationary wiper terminal at top. Secure switch wafer (17) to screws (19) with fiber flatwashers (16), lockwashers (15), and nut (14).

(3) At switch mounting plate (21), install screws (11), lockwashers (12), flatwashers (13), and sleeve spacers (10).

(4) Position subassembly 1A12A2 (9) on sleeve spacers (10) so that crystals are towards switch mounting plate (21) and break in printed wiring is at upper left hand corner, viewed from control knob end. Secure with sleeve spacer (8). Solder crystal leads to the adjacent terminals on switch wafer (17).

(5) At subassembly 1A12A1 (7), solder the two wires, from subassembly 1A12A2 (9), to terminals 1A12A1E36 and 1A12A1E37.

(6) Secure subassembly 1A12A1 (7) to sleeve spacer (8) using screw (2) with lockwasher (3) and terminal lug (4). Install remaining sleeve spacers (6), screws (1), lockwashers (3), and flatwashers (4).

3–19. Rf Oscillator 1A13

The troubleshooting, disassembly, and reassembly procedures necessary for rf oscillator 1A13 are outlined in the following paragraphs. Perform the troubleshooting procedures in *a* below to isolate the faulty component. After the faulty component has been isolated, refer to *b* below to disassemble the unit and to paragraph 3–3 for general repair instructions. After the faulty component has been replaced, use the procedures in *c* below to reassemble the unit. Because there are no alignment procedures, repeat the troubleshooting steps after repairing the unit to check for proper operation.

a. Troubleshooting. To troubleshoot rf oscillator 1A13, perform the following procedures:

(1) Connect test equipment as shown in figure 3–38 and turn power on. Set HP–721A power supply output voltage at +12 Vdc.

(2) Connect AN/URM–145 to terminal 1A13A1E42. The voltage indication on the AN/

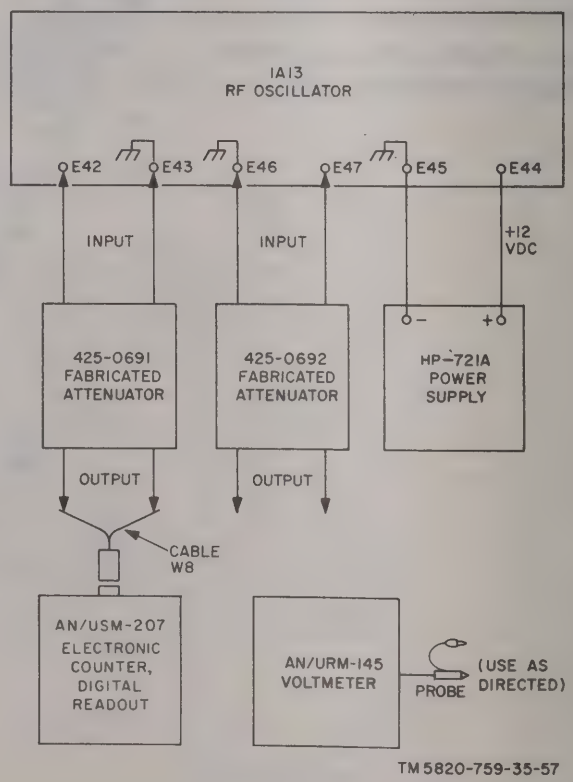


Figure 3–38. Rf oscillator 1A13 test setup.

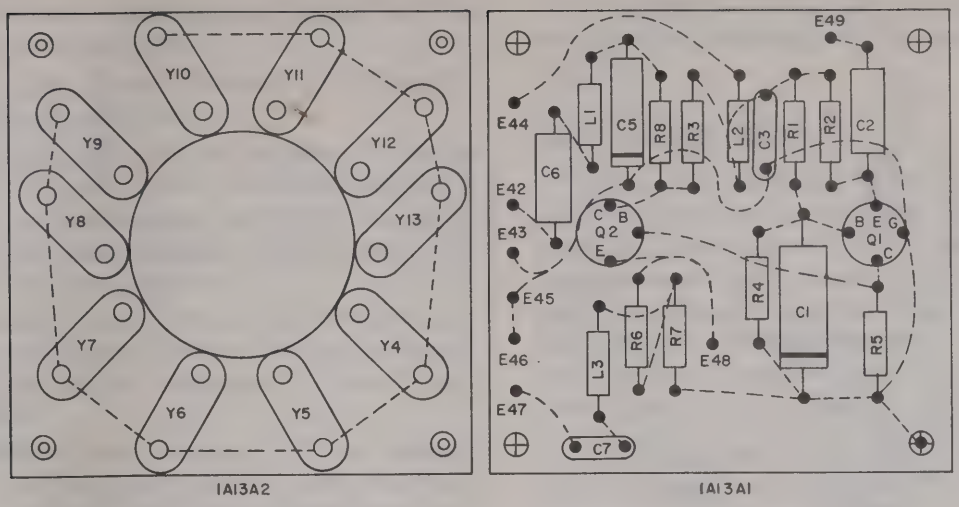


Figure 3-39. Rf oscillator 1A13 component locations and printed wiring.

URM-145 should be 125 ±10 mvac at all positions of switch 1A13A2S1. Disconnect AN/URM-145.

(3) Connect AN/URM-145 to terminal 1A13A1E47. The voltage indication on the AN/URM-145 should be 62 ±10 mvac at all positions of switch 1A13A2S1. Disconnect AN/URM-145.

(4) If proper indications are not obtained in steps (2) and (3) above, refer to figures 3-39 and 1-10 and table 3-16 and troubleshoot circuitry associated with transistor 1A13A1Q2.

(5) Measure and record frequency indicated on AN/USM-207. The frequency indications should be as shown in table 3-17. If proper indications are not obtained, refer to figures 3-39 and 1-10 and table 3-16 and troubleshoot circuitry associated with transistor 1A13A1Q1. Also check crystal associated with switch position producing erroneous indication.

b. Disassembly (fig. 3-40). To disassemble rf oscillator 1A13, proceed as follows:

Table 3-16. RF Oscillator 1A13 DC Voltages

Stage	Emitter	Base	Collector
Q1	5.9 v	6.4 v	3.9 v
Q2	3.5 v	3.9 v	6.5 v

NOTE

All voltage readings in table above taken with ME-26(*)/U.

Table 3-17. RF Oscillator 1A13 Output Frequencies

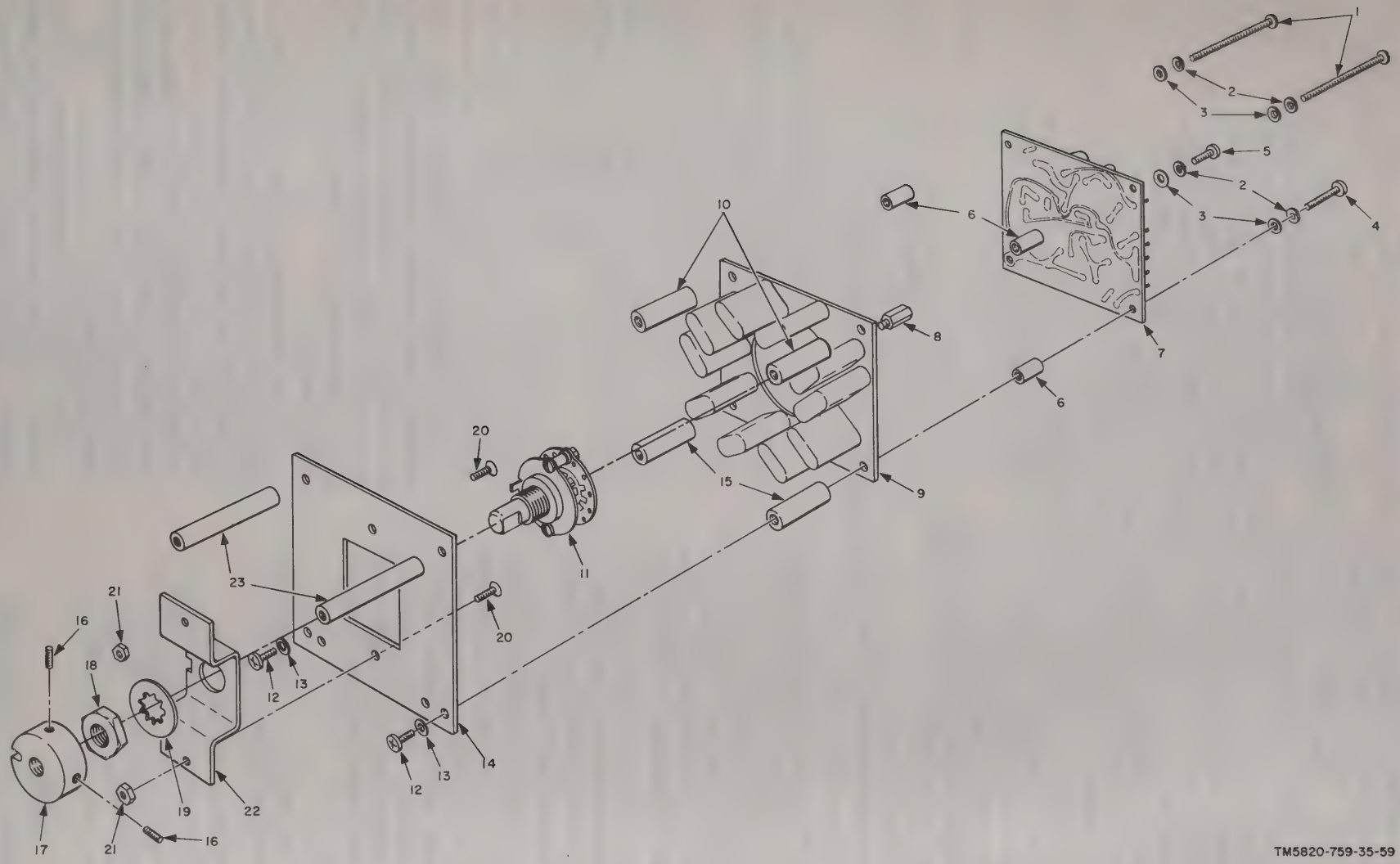
Switch position from full counterclockwise position	Frequency MHz	Tolerance Hz
1	789.5	±39.4
2	790.5	±39.5
3	791.5	±39.5
4	792.5	±39.6
5	793.5	±39.6
6	794.5	±39.7
7	795.5	±39.7
8	796.5	±39.8
9	797.5	±39.8
10	798.5	±39.9

(1) At rear of rf oscillator 1A13, loosen screws (1) and remove sleeve spacers (23). Remove screws (1), sleeve spacers (10, 6), lockwashers (2), and flatwashers (3). Remove screws (4, 5), lockwashers (2), flatwashers (3), and sleeve spacer (6).

(2) At subassembly 1A13A1 (7), tag and unsolder wires from terminals 1A13A1E48 and 1A13A1E49 and remove subassembly 1A13A1 (7).

(3) At subassembly 1A13A2 (9), tag and unsolder crystal leads from rotary switch 1A13S1 (11). Remove sleeve spacer (8) and remove subassembly 1A13A2(9).

(4) At plate (14), remove screws (12), lockwashers (13), and sleeve spacer (15). Loosen setscrews (16) and remove shaft coupling (17). Remove nut (18), lockwasher (19), and rotary



1 Screw
2 Lockwasher
3 Flatwasher
4 Screw
5 Screw
6 Sleeve spacer
7 Subassembly 1A13A1
8 Sleeve spacer
9 Subassembly 1A13A2
10 Sleeve spacer
11 Rotary switch 1A13S1
12 Screw
13 Lockwasher
14 Plate
15 Sleeve spacer
16 Setscrew
17 Shaft coupling
18 Nut
19 Lockwasher
20 Screw
21 Nut
22 Angle bracket
23 Sleeve spacer

Figure 3–40. Rf oscillator 1A13 exploded view.

switch 1A13S1 (11). Remove screws (20), nuts (21) and angle bracket (22).

c. Assembly (fig. 3–40). To assemble rf oscillator 1A13, proceed as follows:

(1) Position plate (14) so that the four holes are at the bottom and install angle bracket (22) with notch on left hand side, viewed from control knob end. Secure angle bracket (22) to plate (14) using screws (20) and nuts (21).

(2) Place rotary switch (11) on angle bracket (22) with locating tab in notch of angle bracket (22) and secure using nut (18) and lockwasher (19).

(3) Position shaft coupling (17) on rotary switch (11) shaft so that notch in shaft coupling (17) is opposite flat portion of switch shaft and the distance from plate (14) to the front of shaft coupling (17) is ¼-inch. Tighten setscrews (16).

(4) Secure sleeve spacers (15) to plate (14) using screws (12) and lockwashers (13).

(5) Place subassembly 1A13A2 (9) on sleeve spacers (15) with crystals towards plate (14) and break in printed circuit at upper left hand corner, viewed from control knob, and install sleeve spacer (8). Solder crystal leads from subassembly 1A13A2 (9) to rotary switch 1A13S1 (11).

(6) At subassembly 1A13A1 (7), solder wires from subassembly 1A13A2 (9) to terminals 1A13A1E48 and 1A13A1E49. Secure subassembly 1A13A1 (7) to sleeve spacer (8) using screw (5), lockwasher (2), and flatwasher (3).

(7) Install remaining screws (1, 4), lockwashers (2), flatwashers (3), and sleeve spacers (6, 10, 23).

3–20. Limiter 1A14

The troubleshooting procedures for limiter 1A14 are outlined below. After the faulty component has been isolated, refer to paragraph 3–3 for general repair instructions. Because there are no required alignment procedures, repeat the troubleshooting steps after replacing the faulty component to check for proper operation. To troubleshoot limiter 1A14, perform the following steps.

a. Connect test equipment as shown in figure 3–41 and turn power on. Set HP–721A power supply output voltage at +12 Vdc.

b. Connect ac probe of ME–26(*)/U to pin A of fabricated connector. Set AN/URM–127 controls to produce a 1 kHz output at 1 Vac, as indicated on ME–26(*)/U. Disconnect ME–26(*)/U ac probe.

c. Connect ME–26(*)/U dc probe to pin D of fabricated connector. Set output level of AN/URM–127 at 0. The indication observed on the ME–26(*)/U should be 2.8±0.3 Vdc.

d. Set output level of AN/URM–127 at 1 Vac. The indication observed on the ME–26(*)/U should be 7.1 ±0.6 Vdc.

e. Quickly disconnect AN/URM–127 from pin

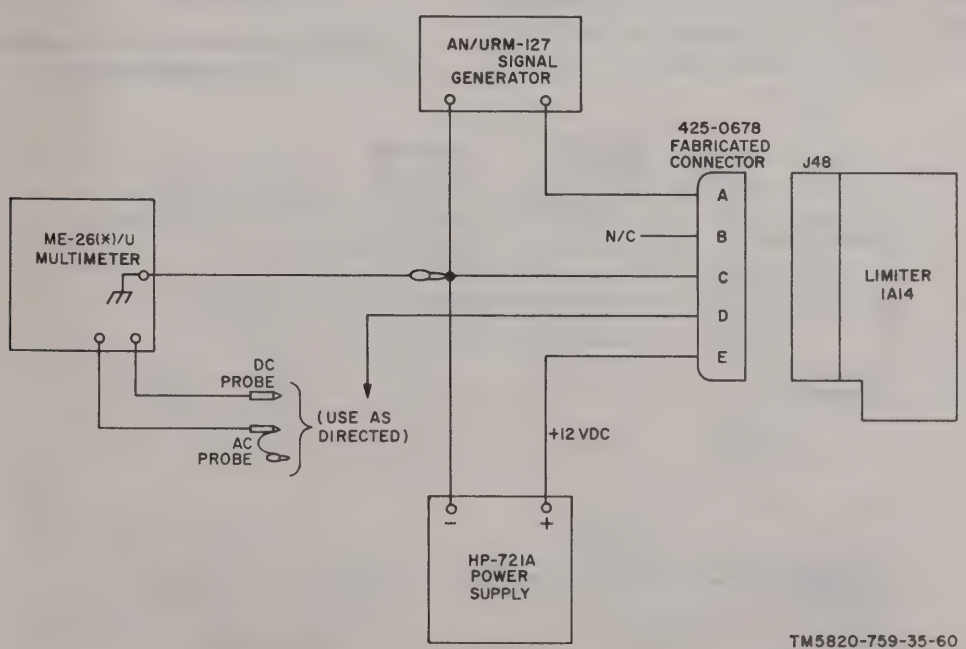


Figure 3–41. Limiter 1A14 test setup.

A of fabricated connector and observe that ME–26(*)/U indication slowly returns to 2.8 ±0.3 Vdc.

f. If proper indications are not obtained in steps *c* through *e* above, refer to figures 3–42 and 1–11 and table 3–18 and troubleshoot circuitry associated with transistors 1A14Q1 and 1A14Q2.

Table 3–18. Limiter 1A14 DC Voltages

Stage	Emitter	Base	Collector
Q1	10.2 v	9.8 v	0.0 v
Q2	2.6 v	2.9 v	11.5 v

NOTE

All voltage readings in table above taken with ME–26(*)/U.

3–21. Limiter 1A15

The troubleshooting and alignment procedures for limiter 1A15 are outlined in the following paragraphs. After the faulty component has been isolated by performing the troubleshooting procedures in *a* below refer to paragraph 3–3 for general repair instructions and to *b* below for the necessary alignment procedures.

a. Troubleshooting. To troubleshoot limiter 1A15, perform the following procedures:

(1) Connect test equipment as shown in figure 3–43. Set output of power supply A at +2 Vdc and power supply B at +12 Vdc.

(2) Adjust resistor 1A15R6 (fig. 3–44) to obtain a +10 ±0.5 Vdc indication on the ME–30(*)/U. If proper indication is not obtained, refer to figures 3–44 and 1–12 and table 3–19 and troubleshoot limiter 1A15.

b. Alignment. To align limiter 1A15, perform the following procedures:

(1) Connect test equipment as shown in figure 3–43 and energize.

(2) Set power supply B output voltage at +12 ±0.5 Vdc.

(3) Set power supply A output voltage at +2.0 Vdc.

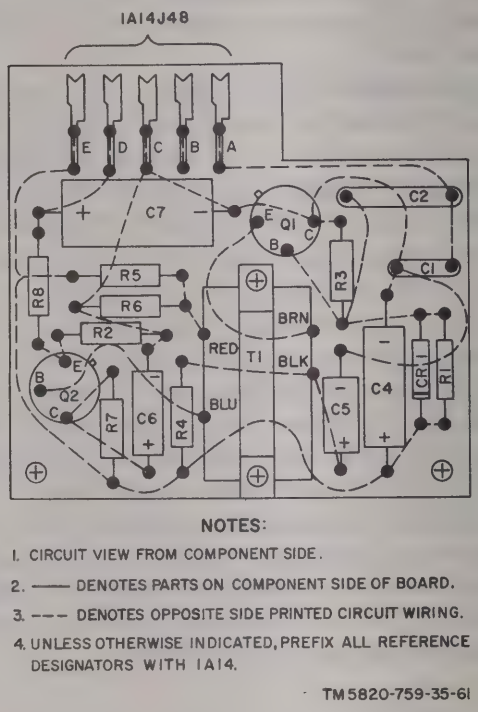


Figure 3–42. Limiter 1A14 component locations and printed wiring.

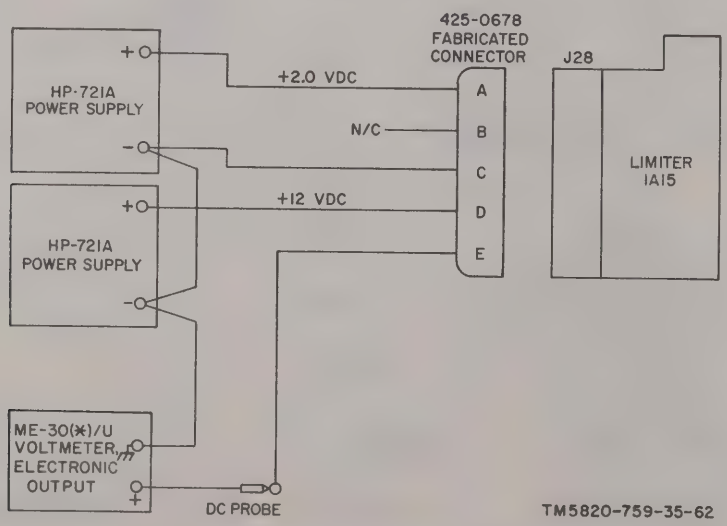


Figure 3–43. Limiter 1A15 test setup.

(4) At limiter 1A15, adjust resistor 1A15R6, figure 3–44, to obtain an ME–30(*)/U indication of +10 ±0.5 Vdc. Disconnect all equipment.

3–22. Af Amplifier 1A16

The troubleshooting procedures for af amplifier 1A16 are outlined below. After the faulty component has been isolated, refer to paragraph 3–3 for general repair instructions. Because alignment procedures are not required for af amplifier 1A16, repeat the troubleshooting steps after replacing the faulty component to check for proper operation. To troubleshoot af amplifier 1A16, perform the following steps.

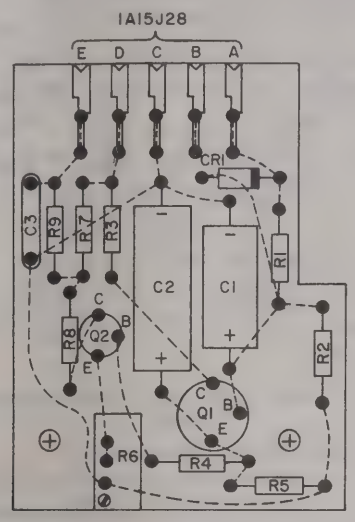


Figure 3–44. Limiter 1A15 components locations and printed wiring.

Table 3–19. Limiter 1A15 DC Voltages

Stage	Emitter	Base	Collector
Q1	1.4 v	1.9 v	11.5 v
Q2	1.3 v	0.70 v	3.4 v

NOTE
All voltage readings in table above taken with ME–26(*)/U.

a. Connect all equipment as shown in figure 3–45. Set PP–1451 power supply output voltage at +12 Vdc.

b. Connect ac probe of ME–26(*)/U across output terminals of AN/URM–127 and adjust controls to produce a 1 kHz output at 260 mvac.

c. Connect ME–26(*)/U ac probe to pin C of fabricated connector. The voltage indication should be 2.4 Vac. Disconnect ME–26(*)/U.

d. Connect AN/USM–281 probe to pin C of fabricated connector. The presentation should be a clean, undistorted sinusoidal waveform.

e. If proper indications are not obtained in steps *c* and *d* above, refer to figures 3–46 and 1–13 and table 3–20 and troubleshoot af amplifier 1A16.

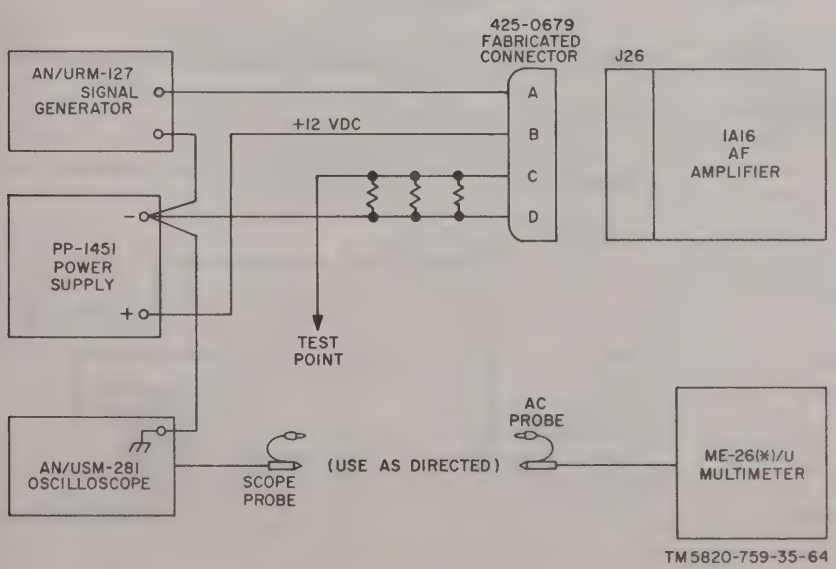


Figure 3–45. Af amplifier 1A16 test setup.

Table 3–20. AF Amplifier 1A16 DC Voltages

Stage	Emitter	Base	Collector
Q1	7.6 v	8.2 v	12.5 v
Q2	13.3 v	12.7 v	7.5 v
Q3	6.9 v	7.5 v	12.8 v
Q4	6.9 v	6.3 v	0.60 v
Q5	13.3 v	12.8 v	6.9 v
Q6	0.0 v	0.60 v	7.0 v

NOTE

All voltage readings in table above taken with ME–26(*)/U.

3–23. Rf Oscillator 1A17

The test procedures for rf oscillator 1A17 outlined below are to be used only to verify the status of the assembly. Repair procedures for rf oscillator 1A17 are not provided.

a. Connect equipment as shown in figures 3–47 and 3–48 and turn power on. Allow 25 minutes for warmup.

b. At top of rf oscillator 1A17, adjust FREQ. ADJ. control to obtain an AN/USM–207 indication of 1.000000 MHz±1 Hz.

c. At top of rf oscillator 1A17, adjust AMPL. ADJ. control to obtain an ME–30(*)/U indication of 750 mv ±10 mvac. Disconnect all equipment.

NOTE

The amplitude may have to be readjusted when the unit is installed in the rt unit, refer to chapter 2 of this manual.

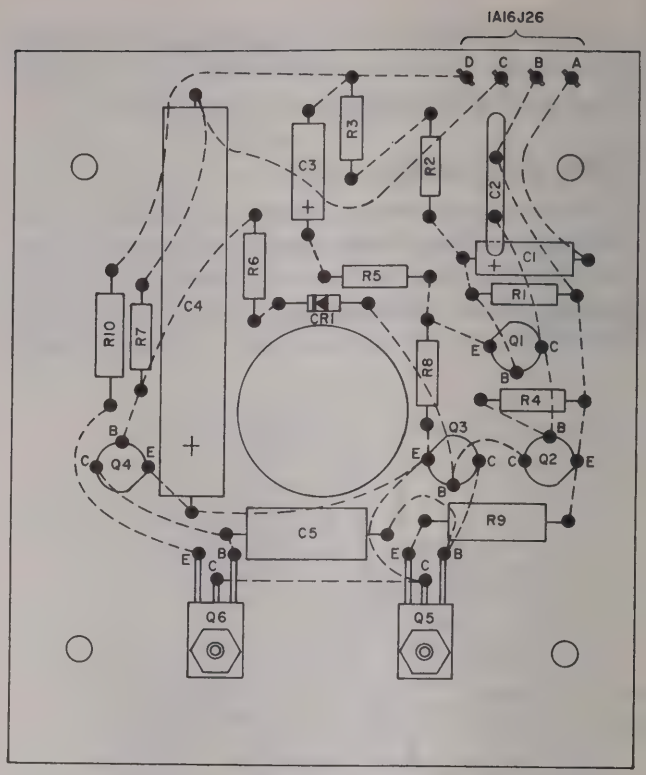


Figure 3–46. Af amplifier 1A16 component locations and printed wiring.

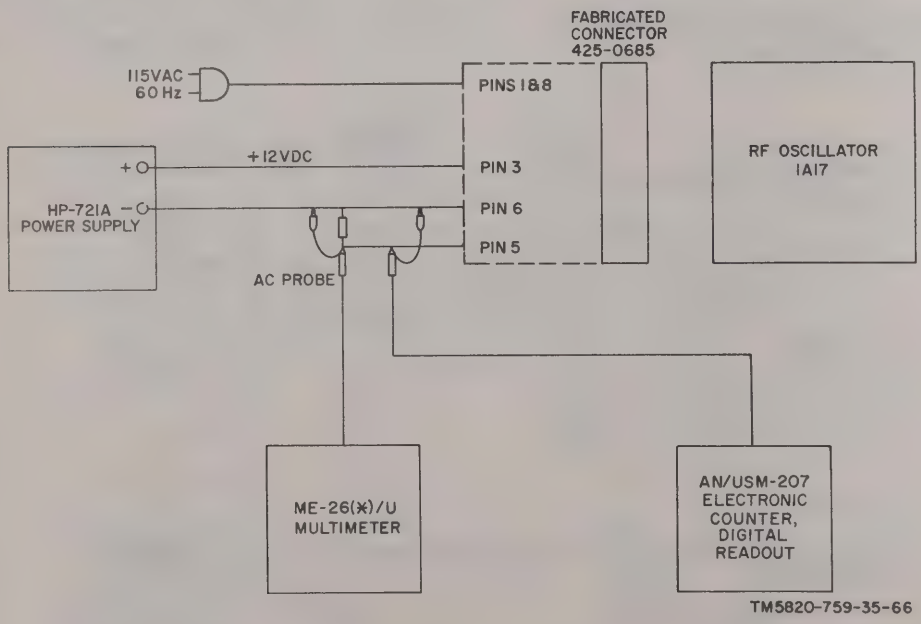


Figure 3–47. Rf oscillator 1A17 test setup.

3–24. Chopper 1A18

The troubleshooting procedures for chopper 1A18A (13.5 volt chopper CV–2487/URC) and 1A18B (26.0 volt chopper CV–2486/URC) are outlined in *a* below for the 13.5 Vdc chopper and in *b* below for the 26.0 Vdc chopper.

a. 13.5 Volt Chopper 1A18A. To troubleshoot the 13.5 volt chopper, perform the following procedures:

(1) Refer to chapter 2 and temporarily install chopper 1A18A in TS–2664/GRM–90.

(2) At TS–2664/GRM–90 fuseholder 1XF1, insert a 25 amp type AGC fuse. Set switch 1S1 at DC.

(3) Connect all test equipment as shown in figure 3–49. Set PP–1451 power supply output level control at 0 and energize.

(4) At TS–2664/GRM–90, connect AN/USM–281 probe to either terminal 6 or 8 on transformer 1T1. Set FUNCTION switch at STBY.

(5) Observing AN/USM–281, slowly increase PP–1451 output voltage and observe that oscillation begins just before power supply output voltage reaches +7 Vdc. If oscillations do not occur, deenergize PP–1451 and check transistors 1A18Q1, 1A18Q2, and associated components (fig. 3–51 and 1–14).

(6) Increase PP–1451 output voltage to +13.5 Vdc. Presentation observed on AN/USM–281 should be a 24 ±1 volt peak-to-peak square with spikes not greater than 7 volts above the waveform. Square wave frequency should be 60 ±15 Hz. If proper indications are not obtained, deenergize power supply and check transistors 1A18Q1, 1A18Q2, feedback transformer 1A18T1, and associated components (fig. 3–51 and 1–14).

(7) At TS–2664/GRM–90, set FUNCTION switch at CW and FREQUENCY KILOCYCLES controls at 2000 kHz. Key and tune TS–2664/GRM–90 for a 100 watt output. The indicated PP–1451 output current should be 22 ±2 amps with TS–2664/GRM–90 keyed.

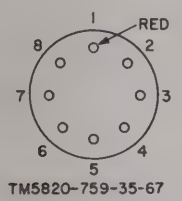


Figure 3–48. Rf oscillator 1A17 pin locations (bottom view).

b. 26.0 Volt Chopper 1A18B. To troubleshoot the 26.0 volt chopper, perform the following procedures:

(1) Refer to chapter 2 and temporarily install chopper 1A18B in TS–2664/GRM–90.

(2) At TS–2664/GRM–90 fuseholder 1XF1, insert a 15 amp type AGC fuse. Set switch 1S1 at DC.

(3) Connect all test equipment as shown in figure 3–49. Set PP–1451 power supply output level control at 0 and energize.

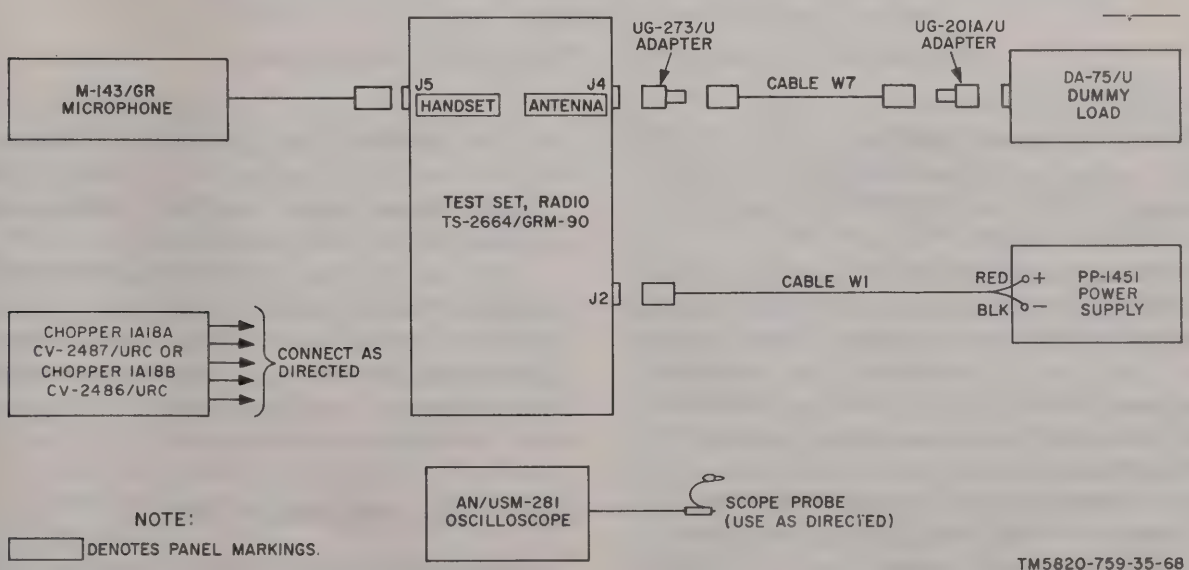


Figure 3–49. Choppers 1A18A and 1A18B, test setup.

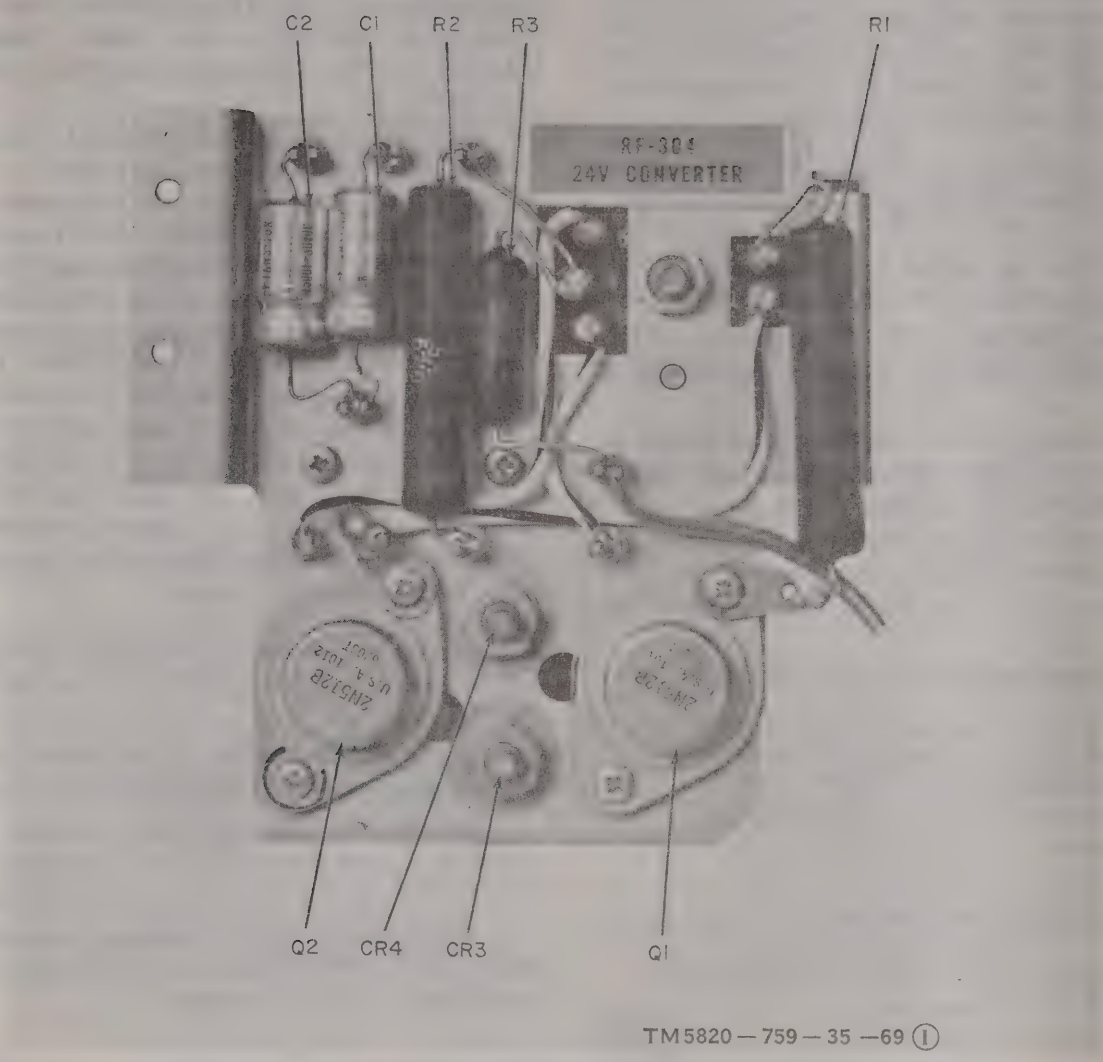


Figure 3-50(1). Chopper 1A18B (CV–2486/URC) parts locations.

(4) At TS–2664/GRM–90, connect AN/USM–281 probe to either terminal 5 or 9 on transformer 1T1. Set FUNCTION switch at STBY.

(5) Observing AN/USM–281, slowly increase PP–1451 output voltage and observe that oscillation begins before power supply output voltage reaches +20 Vdc. If oscillation does not occur, deenergize PP–1451 and check transistors 1A18Q1, 1A18Q2. and associated components (figures 3–50 and 1–15).

(6) Increase PP–1451 output voltage to 26.0 Vdc. Presentation on AN/USM–281 should be a 28 ±2 volt peak-to-peak square wave with spikes no greater than 10 volts above the waveform. Square wave frequency should be 60 ±15 Hz. If proper indications are not obtained, deenergize PP–1451 and check transistors 1A18Q1, 1A18Q2, feedback transformer 1A18T1, and associated components (fig. 3–50 and 1–15).

(7) At TS–2664/GRM–90, set FUNCTION switch at CW and FREQUENCY KILOCYCLES controls at 2000 kHz. Key and tune TS–2664/GRM–90 for a 100 watt output. The indicated PP–1451 output current should be 15 ±3 amps with TS–2664/GRM–90 keyed.

3–25. Filter Assembly 1A19

The test and alignment procedures for filter assembly 1A19 are outlined in the following paragraphs.

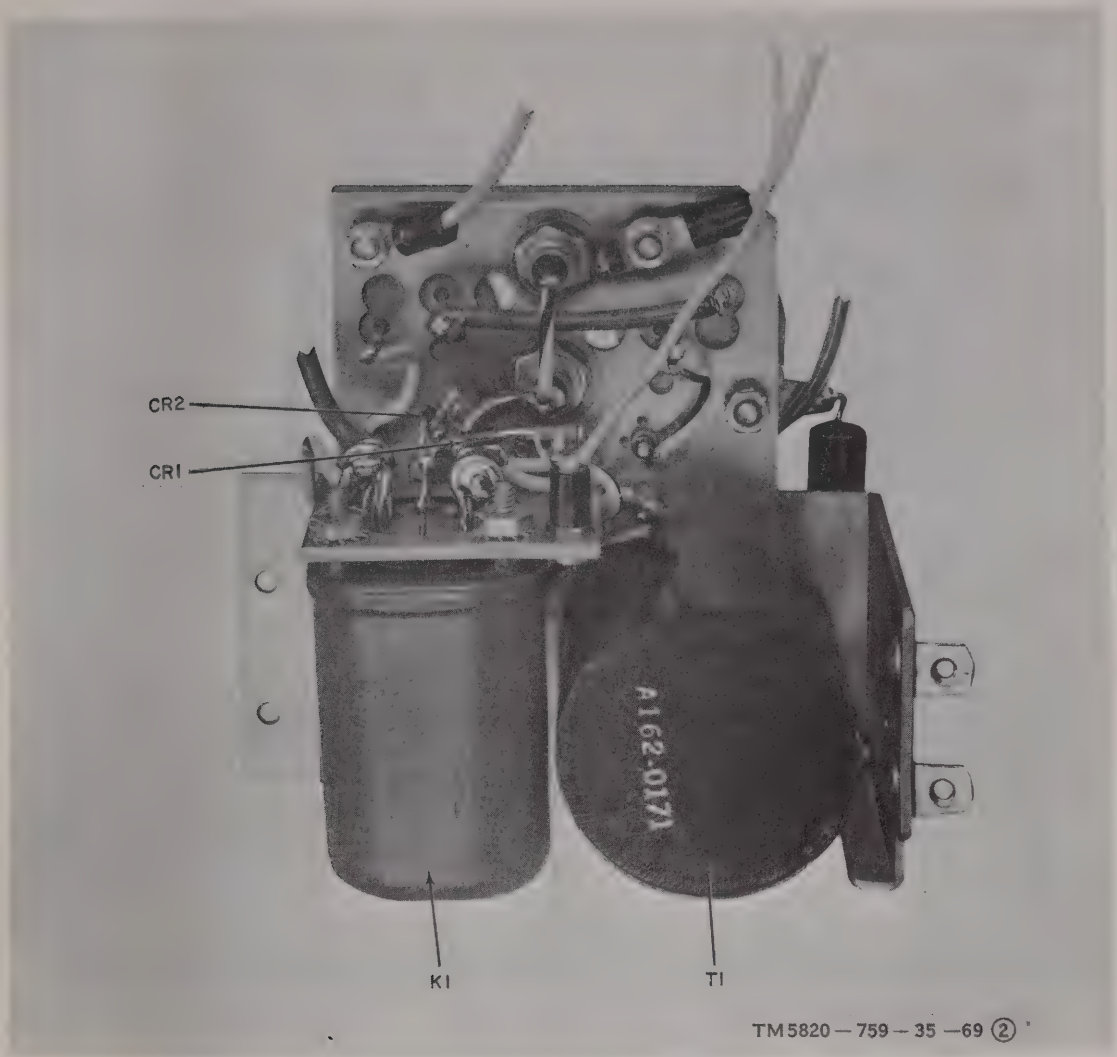


Figure 3-50②. Chopper 1A18B (CV-2486/URC) parts location.

a. Usb Filter 1A19FL6. To test and align usb filter 1A19FL6, perform the following procedures:

(1) Connect test equipment as shown in figure 3-52 and turn power on. Allow 20 minutes for test equipment warmup.

(2) At usb filter 1A19FL6, connect fabricated loads (fig. 3-52) as shown in figure 3-53.

(3) At AN/GRM-50, set controls to produce a cw output at 456.8 kHz. Check frequency on AN/USM-207. Set AN/GRM-50 output level to obtain a 1 Vac indication on ME-26(*)/U. Fine tune AN/GRM-50 to obtain maximum indication on AN/URM-145.

(4) At filter assembly 1A19, adjust capacitors 1A19C45 and 1A19C48 to obtain peak indication on AN/URM-145. The AN/URM-145 indication should be greater than 316 mvac. If proper indication is not obtained, replace filter 1A19FL6 and repeat the preceeding steps.

(5) At AN/GRM-50, set output level to obtain a 1 Vac reference level on the AN/URM-145.

(6) Increase AN/GRM-50 frequency until AN/URM-145 indication is 6 db below the 1 Vac reference level. Record AN/USM-207 frequency indication.

(7) Decrease AN/GRM-50 frequency until AN/URM-145 indication is at the 1 Vac reference level. Continue to decrease the frequency until AN/URM-145 is 6 db below the 1 Vac reference level. Record AN/USM-207 frequency indication.

(8) The frequency indication recorded in step (6) should be 6 kHz ±300 Hz greater than the

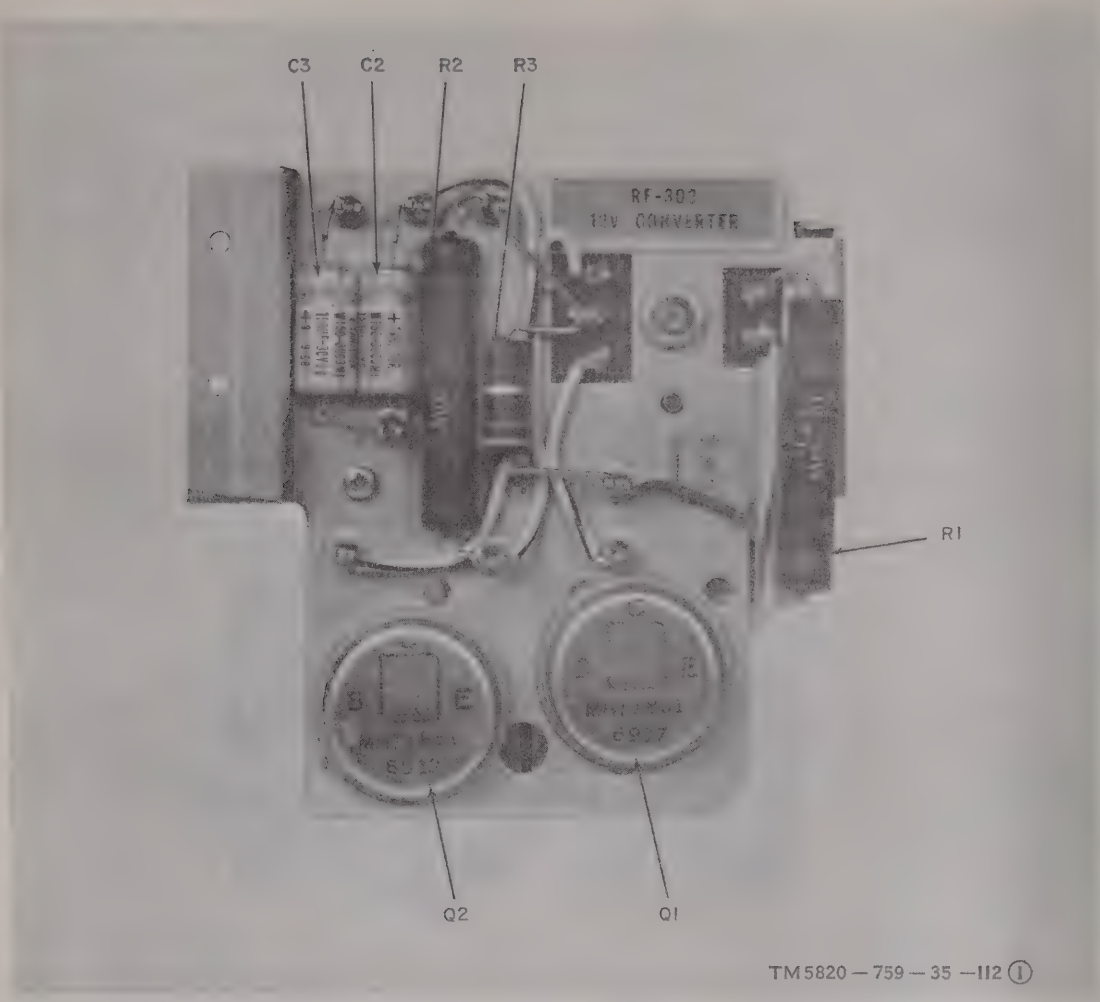


Figure 3–51①. Chopper 1A18A (CV–2487/URC) parts locations.

frequency indication recorded in step (7). If indication is out of tolerance, replace filter 1A19FL6 and repeat the preceeding steps.

(9) At AN/GRM–50, decrease frequency until a 1 mvac indication is obtained on the AN/URM–145. Record AN/USM–207 frequency indication.

(10) At AN/GRM–50, increase frequency until AN/URM–145 indication returns to the 1 Vac reference level. Continue to increase the frequency until the AN/URM–145 indication is at 1 mvac. Record AN/USM–207 frequency indication.

(11) The frequency recorded in step (9) should not be greater than 6 kHz above frequency recorded in step (10). If proper indication is not obtained, replace filter 1A19FL6 and repeat the preceeding steps.

b. LSB Filter 1A19FL5. To test and align lsb filter 1A19FL5, perform the following procedures:

(1) Connect test equipment as shown in figure 3–52 and turn power on. Allow 20 minutes for test equipment warmup.

(2) At lsb filter 1A19FL5, connect fabricated loads as shown in figure 3–53.

(3) At AN/GRM–50, set controls to produce a cw output at 453.2 kHz. Check frequency on AN/USM–207. Set AN/GRM–50 output level to obtain a 1 Vac indication on ME–26(*)/U. Fine tune AN/GRM–50 to obtain maximum indication on AN/URM–145.

(4) At filter assembly 1A19FL5, adjust capacitors 1A19C41 and 1A19C44 to obtain peak indication on AN/URM–145. The AN/URM–145 indication should be greater than 316 mvac. If proper indication is not obtained, replace filter 1A19FL5 and repeat the preceeding steps.

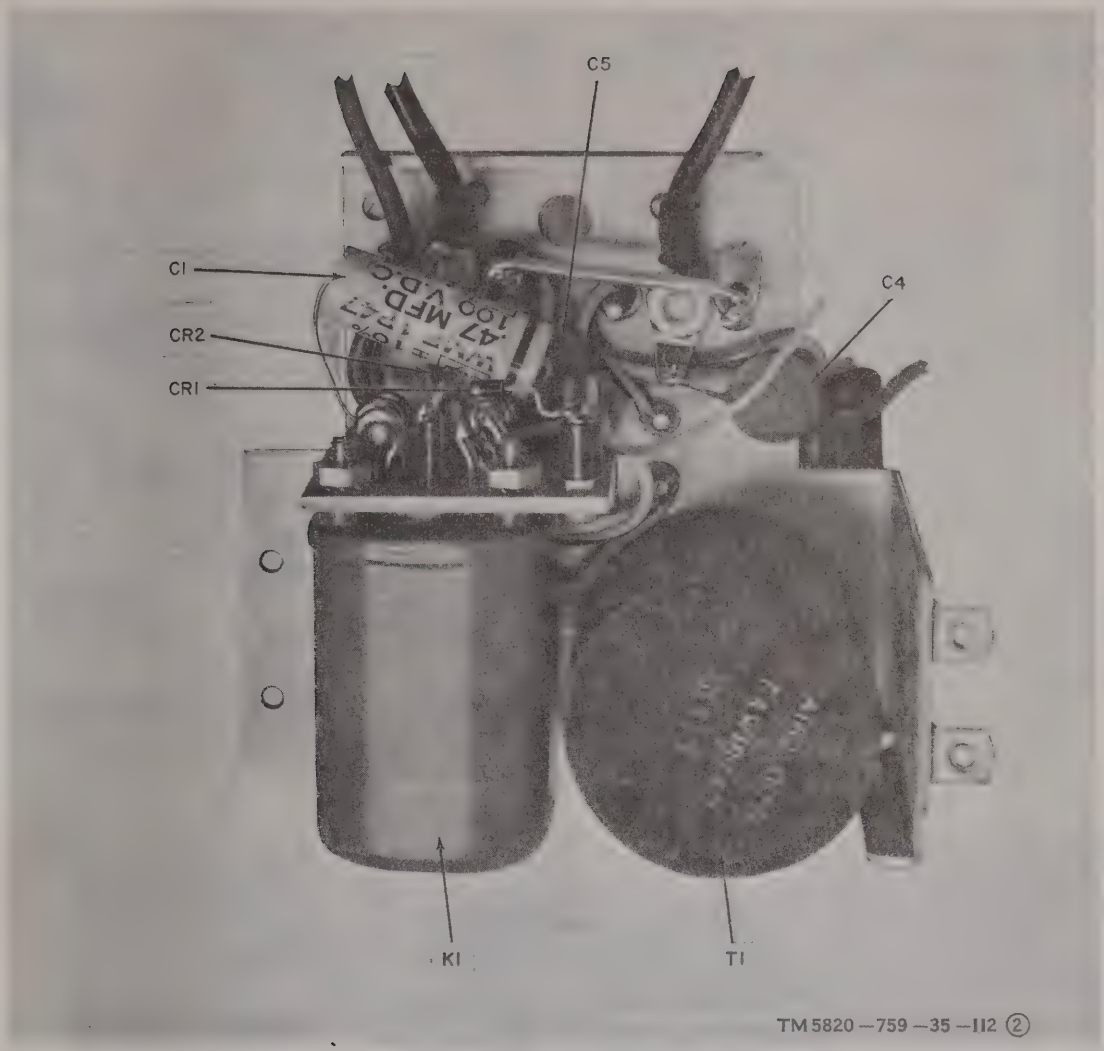


Figure 3–51②. Chopper 1A18A (CV–2487/URC) parts location.

(5) At AN/GRM–50, set output level to obtain a 1 Vac reference level on the AN/URM–145.

(6) Increase AN/GRM–50 frequency until AN/URM–145 indication is 6 db below the 1 Vac reference level. Record AN/USM–207 frequency indication.

(7) Decrease AN/GRM–50 frequency until AN/URM–145 indication is at the 1 Vac reference level. Continue to decrease the frequency until AN/URM–145 indication is 6 db below the 1 Vac reference level. Record AN/USM–207 frequency indication.

(8) The frequency indication recorded in step (6) should be 6 kHz ±300 Hz greater than the frequency indication recorded in step (7). If indication is out of tolerance, replace filter 1A19FL5 and repeat the preceeding steps.

(9) At AN/GRM–50, decrease frequency until a 1 mvac indication is obtained on the AN/URM–145. Record AN/USM–207 frequency indication.

(10) At AN/GRM–50, increase frequency until AN/URM–145 indication returns to the 1 Vac reference level. Continue to increase the frequency until AN/URM–145 indicates 1 mvac. Record AN/USM–207 frequency indication.

(11) The frequency recorded in step (9) should be no greater than 6 kHz above frequency recorded in step (10). If proper indication is not obtained, replace filter 1A19FL5 and repeat the preceeding steps.

3–26. Speed Decreaser Gear Assembly 1MP70

The disassembly and reassembly instructions for speed decreaser gear assembly 1MP70 are outlined in the following paragraphs.

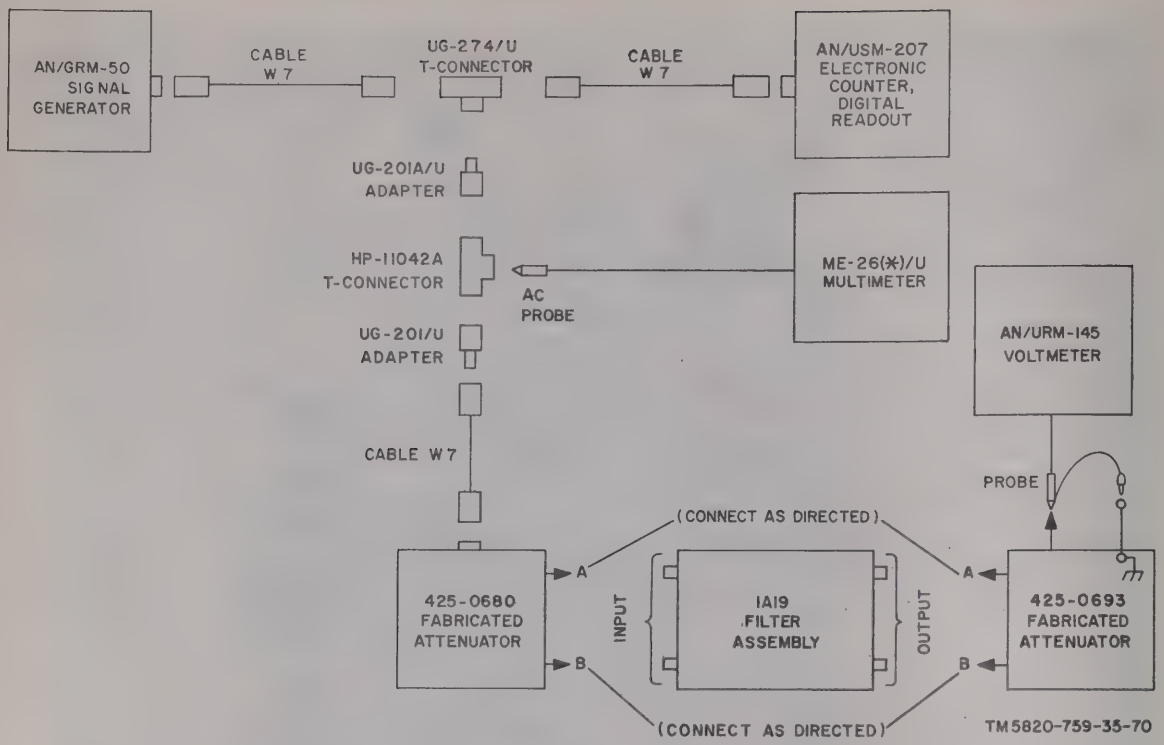


Figure 3–52. Filter assembly 1A19 test setup.

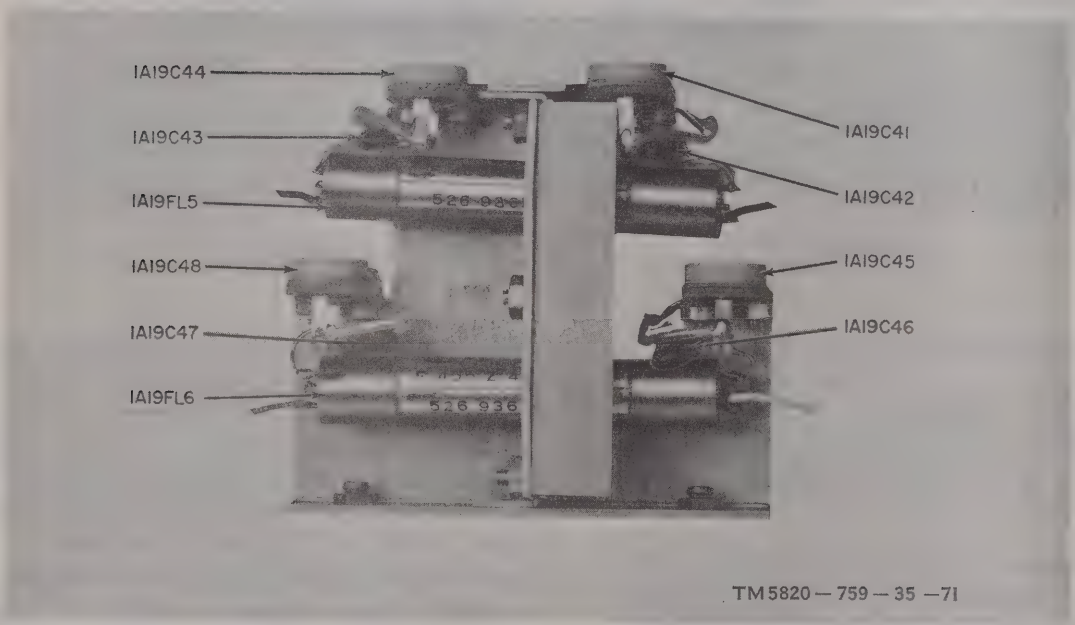


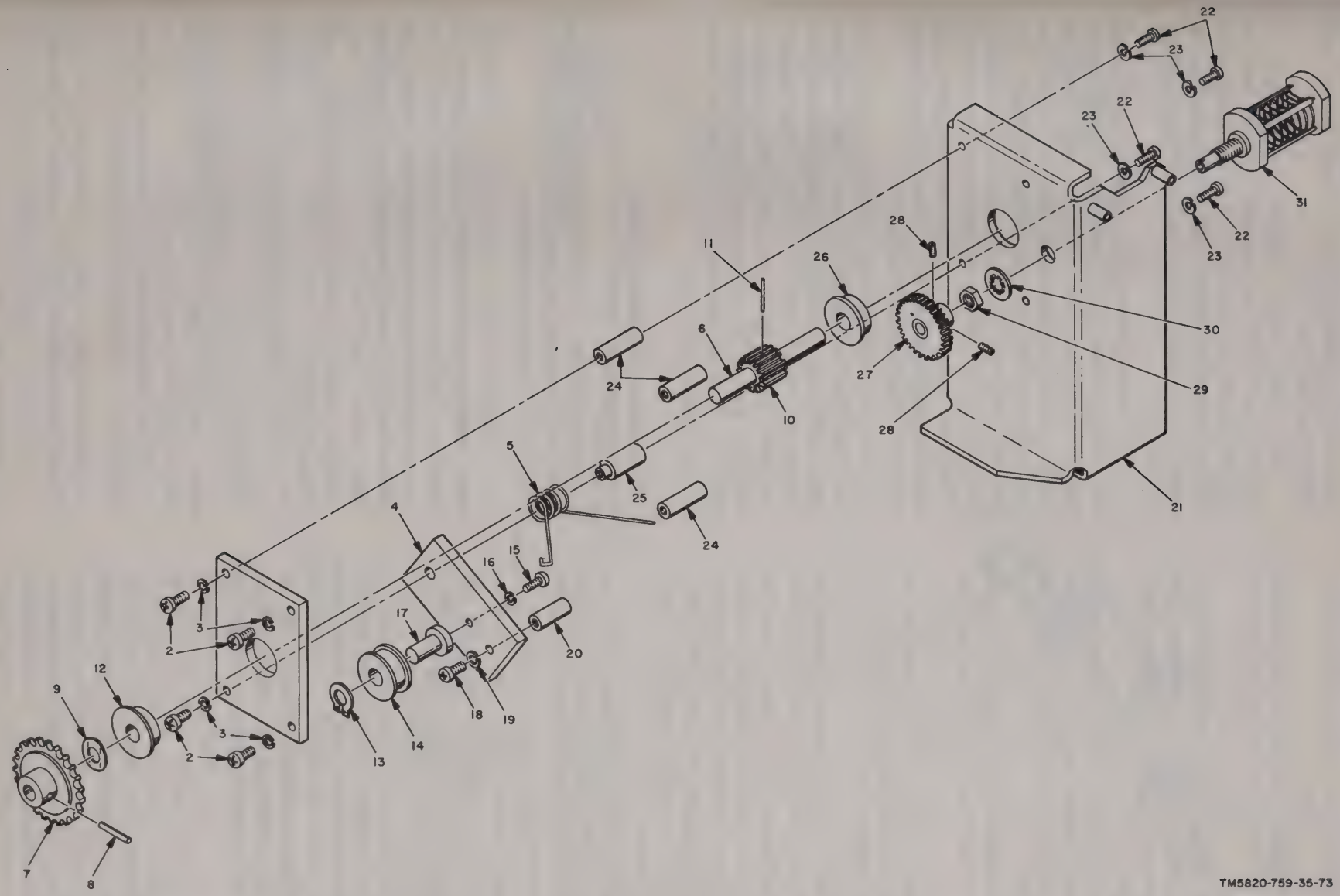
Figure 3–53. Filter assembly 1A19 component locations and test equipment connection points.

a. Disassembly (fig. 3–54). To disassemble speed decreaser gear assembly 1MP70, proceed as follows:

(1) At bearing mounting plate (1), remove four screws (2), four lockwashers (3), and plate (1).

(2) Unhook spiral torsion spring (5) from eye bracket (4) and remove eye bracket (4) and spiral torsion spring (5).

(3) At sprocket wheel (7), drive out headless straight pin (8) and remove sprocket wheel (7) and spring washer (9) from shaft (6). Slide



1 Bearing mounting plate
2 Screw
3 Lockwasher
4 Eye bracket
5 Spiral torsion spring
6 Straight shaft
7 Sprocket wheel
8 Headless straight pin
9 Spring washer
10 Spur gear
11 Headless straight pin
12 Sleeve bearing
13 Retaining ring
14 Roller
15 Screw
16 Lockwasher
17 Shouldered shaft
18 Screw
19 Lockwasher
20 Sleeve spacer
21 Angle bracket
22 Screw
23 Lockwasher
24 Sleeve spacer
25 Stepped spacer
26 Sleeve bearing
27 Anti-backlash spur gear
28 Setscrew
29 Nut
30 Lockwasher
31 Capacitor 1C13

Figure 3–54. Speed Decreaser Gear Assembly 1MP70 exploded view.

straight shaft (6) out of sleeve bearing (12) and remove sleeve bearing (12) from bearing mounting plate (1).

(4) At spur gear (10), drive out headless straight pin (11) and slide spur gear (10) off straight shaft (6).

(5) At eye bracket (4), remove retaining ring (13) and slide roller (14) off shouldered shaft (17). Remove screw (18), lockwasher (19), and shouldered shaft (17).

(6) At angle bracket (21), remove four screws (22), four lockwashers (23, 30), three sleeve spacers (24), one stepped spacer (25), and sleeve bearing (26).

(7) At anti-backlash spur gear (27), loosen two setscrews (28) and remove anti-backlash spur gear (27).

(8) At capacitor 1C13 (31), remove nut (29), lockwasher (30) and remove capacitor 1C13 (31) from angle bracket (21).

b. Assembly (fig. 3–54). To assemble speed decreaser gear assembly 1MP70, proceed as follows:

(1) At angle bracket (21), install capacitor 1C13 (31) with fixed plates on top and so that when rotor is half-way meshed with fixed plates, the rotor plates are on the left hand side. Secure capacitor 1C13 (31) to angle bracket (21) with nut (29) and lockwasher (30).

(2) Slide anti-backlash spur gear (27) onto capacitor 1C13 (31) shaft and position so that setscrews (28) are at a 45 degree angle from vertical. Tighten setscrews (28).

(3) At angle bracket (21), install three sleeve spacers (24), one stepped spacer (25) and secure using four screws (22) with lockwashers (23). Install sleeve bearing (26) with flange at front of bracket (21).

(4) Position spur gear (10) on straight shaft (6) so that hole in spur gear (10) is aligned with hole near center of straight shaft (6) with the end opposite the hole towards hole at end of straight shaft (6). Secure spur gear (10) to straight shaft (6) with headless straight pin (11).

(5) Install sleeve bearing (12) on bearing mounting plate (1). Slide straight shaft (6) through sleeve bearing (12) with hole at end of straight shaft (6) on flanged side of sleeve bearing (12). Place spring washer (9) on straight shaft (6) with flat portion against sleeve bearing (12) flange. Place sprocket wheel (7) on straight shaft (6), with hub towards end of straight shaft (6). Align hole in sprocket wheel (7) hub with hole at end of straight shaft (6) and secure with headless straight pin (8).

(6) Place spiral torsion spring (5) on stepped spacer (25) so that end, opposite hook, is against angle bracket (21). This end must come off the bottom of stepped spacer (25) and rest on top of sleeve spacer (24), located below capacitor 1C13 (31).

(7) Secure sleeve spacer (20) to eye bracket (4) using screw (18) and lockwasher (19). Secure shouldered shaft (17) to opposite side of eye bracket (4) using screw (15) and lockwasher (16). Place roller (14) on shouldered shaft (17) and slip retaining ring (13) over end of shouldered shaft (17). Place assembled eye bracket (4) on stepped spacer (25) with sleeve spacer (20) against angle bracket (21). Place spiral torsion spring (5) hook on eye bracket (4).

(8) At anti-backlash spur gear (27), hold back gear and rotate front gear clockwise four teeth and hold both gears. Position assembled bearing mounting plate (1) over sleeve spacers (24, 25). Engage spur gear (10) with anti-backlash spur gear (27) and secure bearing mounting plate (1) to sleeve spacers (24, 25) using screws (2) and lockwashers (3).

3–27. Speed Decreaser Gear Assembly 1MP71

The disassembly and reassembly instructions for speed decreaser gear assembly 1MP71 are outlined in the following paragraphs.

a. Disassembly (fig. 3–55). To disassemble speed decreaser gear assembly 1MP71, proceed as follows:

(1) Remove four thread-cutting screws (1), gear cover (2), and idler shaft mounting plate (3).

(2) At straight shaft (5), remove spur gear subassembly (4).

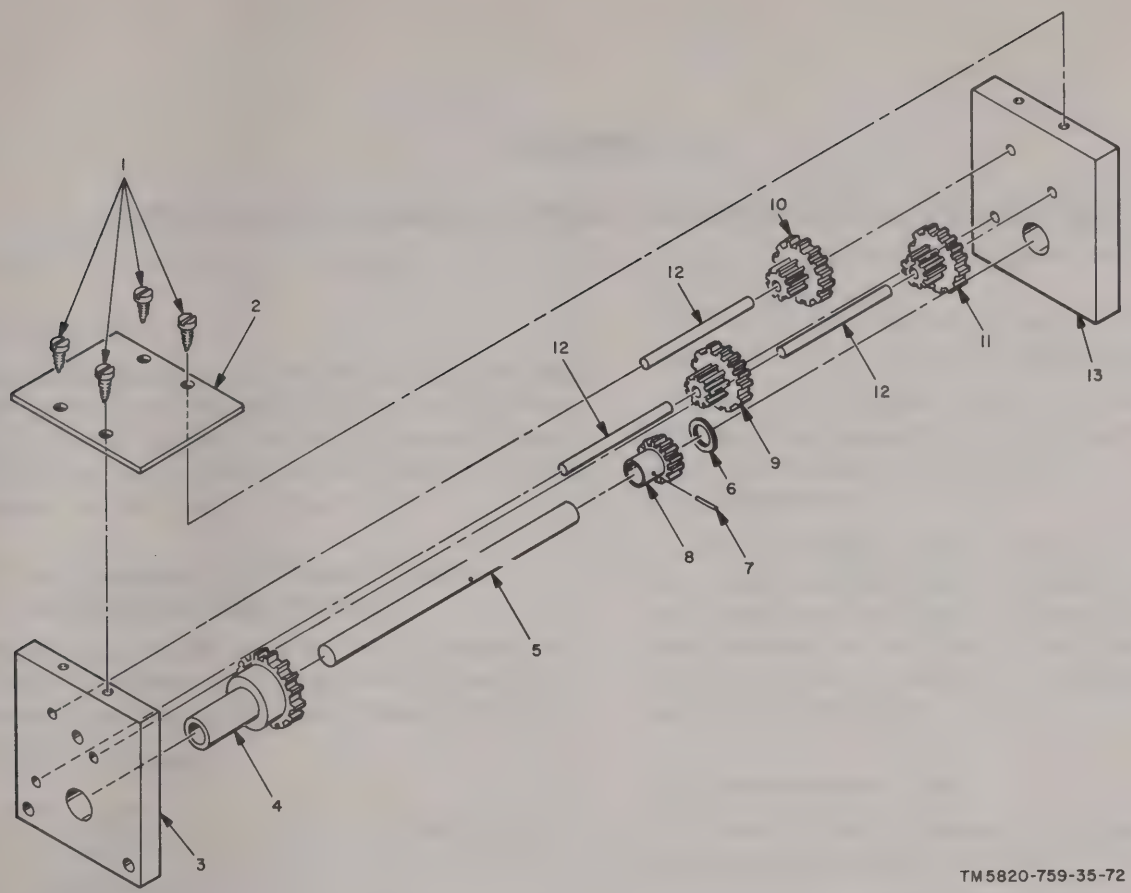
(3) At three straight shafts (12), remove idler gears (9, 10, 11).

(4) At idler shaft mounting plate (13), remove straight shafts (12, 5). Remove spring washer (6) from straight shaft (5).

(5) At straight shaft (5), drive out headless straight pin (7) and remove spur gear (8).

b. Assembly (fig. 3–55). To assemble speed decreaser gear assembly 1MP71, proceed as follows:

(1) At idler shaft mounting plate (13), install three straight shafts (12).



1 Thread-cutting screws
2 Gear cover
3 Idler shaft mounting plate
4 Spur gear subassembly
5 Straight shaft
6 Spring washer
7 Headless straight pin
8 Spur gear
9 Idler gear
10 Idler gear
11 Idler gear
12 Straight shaft
13 Idler shaft mounting plate

Figure 3–55. Speed Decreaser Gear Assembly 1MP71 exploded view.

(2) At straight shaft (5), install spur gear (8) so that when hole in spur gear (8), is aligned with hole in straight shaft (5), the distance measured from the end of straight shaft (5) to the hub of spur gear (8) is 1 15/32 inches. Secure spur gear (8) to straight shaft (5) with headless straight pin (7). Slide spring washer (6) onto straight shaft (5). Install straight shaft (5) on idler shaft mounting plate (13).

(3) Place idler gear (11) on straight pin (12) and mesh teeth with spur gear (8).

(4) Place idler gear (10) on straight shaft (12) and mesh teeth with idler gear (11).

(5) Place idler gear (9) on straight shaft (12) and mesh teeth with idler gear (10).

(6) Place spur gear subassembly (4) on straight shaft (5) and mesh teeth with idler gear (9).

(7) Slide idler shaft mounting plate (3) onto straight shafts (5, 12) and secure gear cover to idler shaft mounting plates (3, 13) with four thread-cutting screws (1).

CHAPTER 4

DEPOT MAINTENANCE COUPLER, ANTENNA CU–1782/GRC–165

4–1. General

The depot maintenance procedures for the antenna coupler are outlined in this chapter. These procedures are prepared for use by Depot Maintenance Shops for antenna couplers that have been removed from service for repair.

4–2. Test Equipment And Special Items Required For Maintenance

The test equipment required for antenna coupler depot maintenance procedures is listed in *a* below with additional equipment listed in *b* below.

a. Test Equipment.

Equipment	Qty	Technical manual
Radio Test Set AN/GRM–90	1	
Wattmeter AN/URM–120	1	TM 11–6625–446–15
Dummy Load, Electrical DA–75/U.	1	TM 11–6625–446–15
Multimeter HP–410C	1	
Antenna AS–2203/GRC–165	1	TM 11–5820–759–12
Multimeter ME–26(*)/U	1	TM 11–6625–200–15

b. *Additional Equipment.*

(1) Cable W5 (CG–3467/U).
(2) Cable W6 (CX–10817/U).
(3) Cable W7 (HP–10503A).
(4) Adapter UG–273/U.
(5) Adapter UG–255/U.
(6) Adapter UG–201/U.
(7) Probe T connector HP–11042A.

4–3. General Parts Replacement Techniques

Most of the parts on the antenna coupler can be reached and replaced easily without special procedures, however, the following general precautions do apply.

a. Refer back to paragraph 3–3 and review the general precautions. Careless replacement of parts can cause faults.

b. Do not disturb the settings of the variable capacitors on swr bridge 2A1 unless specified.

c. Use a pencil-type soldering iron with a 25 watt maximum capacity for small parts. Use a 60 watt soldering iron for the buss wire and other large connections.

d. When soldering diode leads in swr bridge 2A1, solder quickly. Where wiring permits, use a heat sink (such as long-nose pliers) between soldered connection and the diode. Use the same length and dress of leads as used originally for all parts in swr bridge 2A1.

4–4. Performance Test

To check antenna coupler for proper operation perform the following procedures.

WARNING

DEATH or SERIOUS INJURY may result from hazards in the following test unless proper safety measures are observed. The ANT. terminal on the antenna coupler unit carries lethal voltages during transmit.

a. Connect all equipment as shown in figure 4–1 and turn power on.

b. At TS–2664/GRM–90 set FREQUENCY KILOCYCLES controls at 14,999 kHz, FUNCTION switch at CW, and TRANSMIT AUDIO control at TUNE.

c. At antenna coupler set Meter switch at REFLECTED POWER, COARSE TUNE switch at 6, LOAD at 862, and FINE TUNE at 400.

d. Key and tune TS–2664/GRM–90.

e. At antenna coupler adjust LOAD control for minimum reflected power with TS–2664/GRM–90 keyed.

NOTE

If null is not obtained, unkey TS–2664/GRM–90 and advance COARSE TUNE switch one position and repeat LOAD

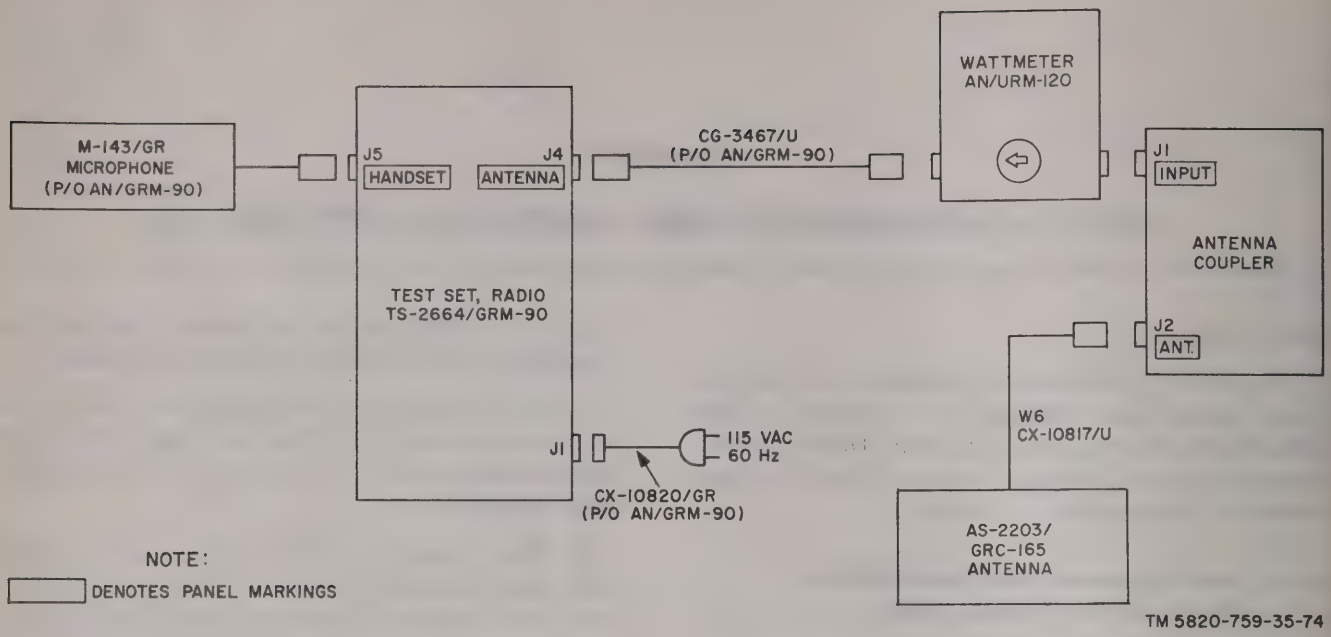


Figure 4–1. Coupler, Antenna CU–1782/GRC–165 test setup.

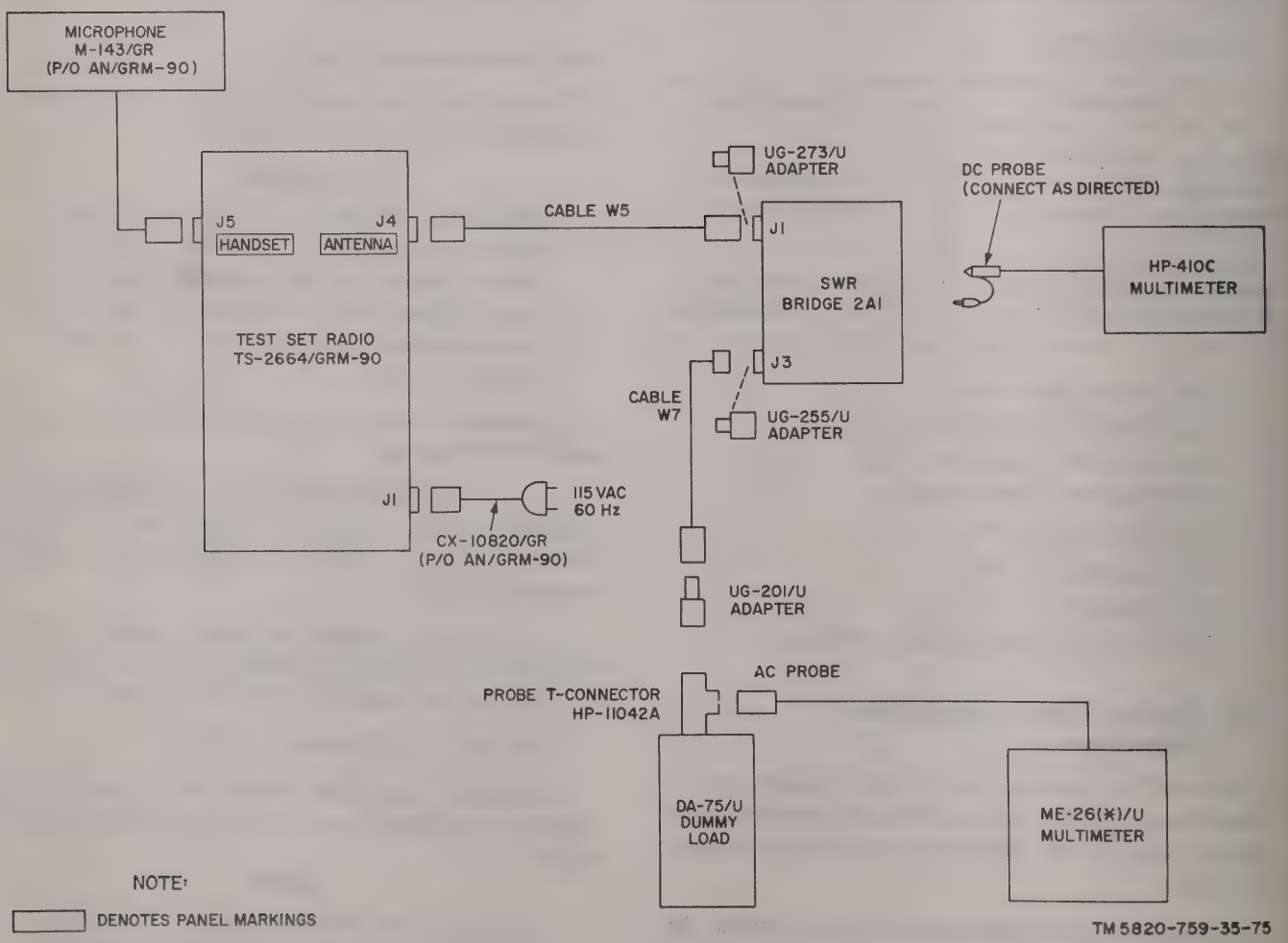


Figure 4–2. SWR bridge 2A1 test setup.

control tuning. Repeat this procedure until a null is obtained.

f. Key TS–2664/GRM–90 and adjust FINE TUNE control for minimum reflected power. Unkey TS–2664/GRM–90.

g. At TS–2664/GRM–90 key and adjust TRANSMIT AUDIO control for 100 watts output.

h. At antenna coupler (TS–2664/GRM–90 keyed) readjust LOAD and FINE TUNE controls for minimum reflected power. At antenna coupler power meter, the reflected power should be less than 4 watts for a swr of 1.5 to 1.

i. If the results of step *h* above are not acceptable, refer to figure 6–20 and make continuity checks.

4–5. SWR Bridge 2A1

The troubleshooting procedures necessary for swr bridge 2A1 are outlined below. After the faulty component has been isolated by performing the troubleshooting procedures, refer to paragraph 4–3 for general parts replacement techniques. Repeat the troubleshooting procedures to align the assembly after repair.

a. Connect the equipment as shown in figure 4–2 and turn power on.

b. At swr bridge 2A1, connect DA–75/U dummy load to BNC connector 2A1J3 and connect TS–2664/GRM–90 ANTENNA output (J4) to 2A1J1.

c. Connect HP–410C dc probe to the reflected output terminal, figure 4–3. Connect the negative lead of the HP–410C to the case and set HP–410C function switch to the 15 ua range.

d. At TS–2664/GRM–90 set FREQUENCY KILOCYCLES controls at 14,999 kHz, FUNCTION switch at CW, and TRANSMIT AUDIO control at TUNE. Key TS–2664/GRM–90, and adjust PRESELECTOR and PA TUNE controls for maximum output. Unkey and rotate TRANSMIT AUDIO control fully counterclockwise, key and readjust clockwise for 100 watts output, 70.7 Vac on ME–26(*)/U. Unkey TS–2664/GRM–90.

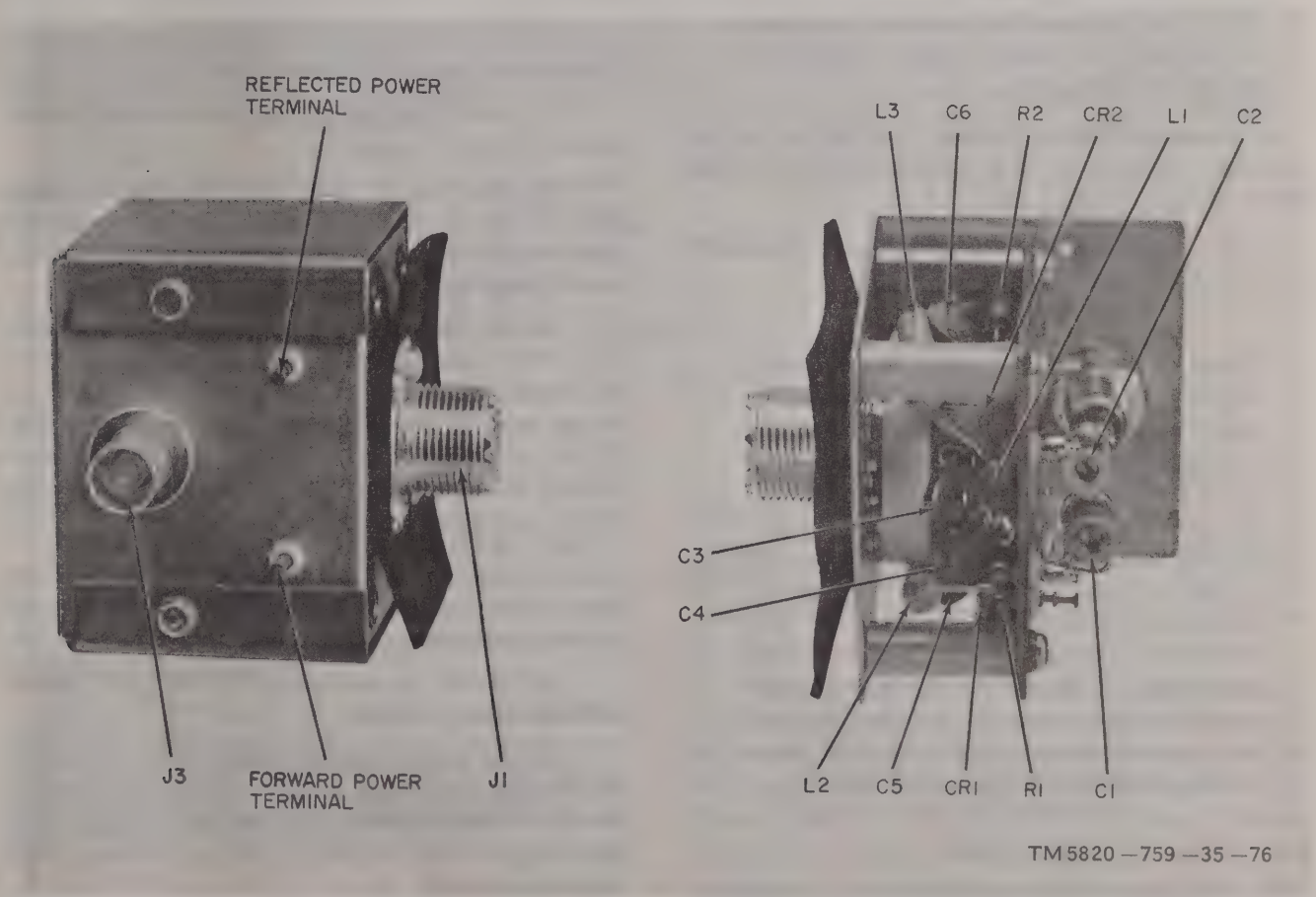


Figure 4–3. SWR bridge 2A1 component locations.

e. Key TS–2664/GRM–90 and adjust 2A1C2, figure 4–3, for a null indication of less than 5 ua. Unkey TS–2664/GRM–90.

NOTE

If a null of less than 5 ua cannot be obtained, continue with steps *f* through *l* below to check the remaining circuitry.

f. Connect HP–410C probe to forward output terminal (fig. 4–3), and set HP–410C function switch to the 15 ma range.

g. Key TS–2664/GRM–90 and record HP–410C indication. Unkey TS–2664/GRM–90.

h. Reverse Dummy Load DA–75/U and TS–2664/GRM–90 connections at swr bridge 2A1 using the appropriate adapters.

i. Set HP–410C function switch back to the 15 ua range.

j. Key TS–2664/GRM–90 and adjust 2A1C1, figure 4–3, for a null indication of less than 5 ua. Unkey TS–2664/GRM–90.

NOTE

If a null cannot be obtained, continue with steps *k* through *l* below to check remaining circuitry.

k. Connect HP–410C probe to reflected output terminal and set HP–410C function switch to the 15 ma range.

l. Key TS–2664/GRM–90 and record HP–410C indication. Unkey TS–2664/GRM–90.

NOTE

When swr bridge 2A1 is properly aligned, the nulls of steps *e* and *j* above must be less than 5 ua. The values recorded in steps *g* and *l* above should be 5 ma ±2 ma and within 1 ma of each other. If these requirements have not been obtained, refer to figure 6–20 and check the circuitry using the ME–26(*)/U as an ohmmeter. Check diodes 2A1CR1 and 2A1CR2 for proper forward and reverse resistance. If the values of steps *g* and *l* are different by more than 1 ma, re-dress the leads of those components that were replaced to match the original lengths.

4–6. Removal Techniques

The removal procedures for coil 2L1, coil 2L2, rotary switch 2S1, and the dial indicators are outlined in the following paragraphs. The removal procedure for swr bridge 2A1 is contained in chapter 2 of this manual.

a. Coil 2L1 (fig. 4–4①, ②). To remove coil 2L1 from the antenna coupler, proceed as follows:

(1) Refer to paragraph 2–12*a* and remove antenna coupler cover.

(2) At front of bracket (1), loosen nut (2) securing ring spacer (3) to bracket (1). Rotate ring spacer (3) so that flat portion is against stud link chain (4). Slip stud link chain (4) off sprocket wheel (5). Loosen setscrew securing sprocket wheel (5) to coil 2L1 (6) shaft and remove sprocket wheel (5).

(3) At front solder terminal on coil 2L1 (6), unsolder resistor and white/blue wire.

(4) At rear screw terminal on coil 2L1 (6), disconnect red ground wire.

(5) At rear screw terminal on coil 2L2 (7), disconnect red wire.

(6) At bottom of coil 2L1 (6), remove screws and hardware securing coil 2L1 (6) to bracket (1) and remove coil 2L1 (6) from antenna coupler.

b. Coil 2L2 (fig. 4–4). To remove coil 2L2 from the antenna coupler, proceed as follows:

(1) Refer to paragraph 2–12*a* and remove antenna coupler cover.

(2) At rear of coil 2L2 (7), unsolder buss wire from coil 2L2 (7) solder terminal. Disconnect coaxial wire and red wire from coil 2L2 (7) screw terminal.

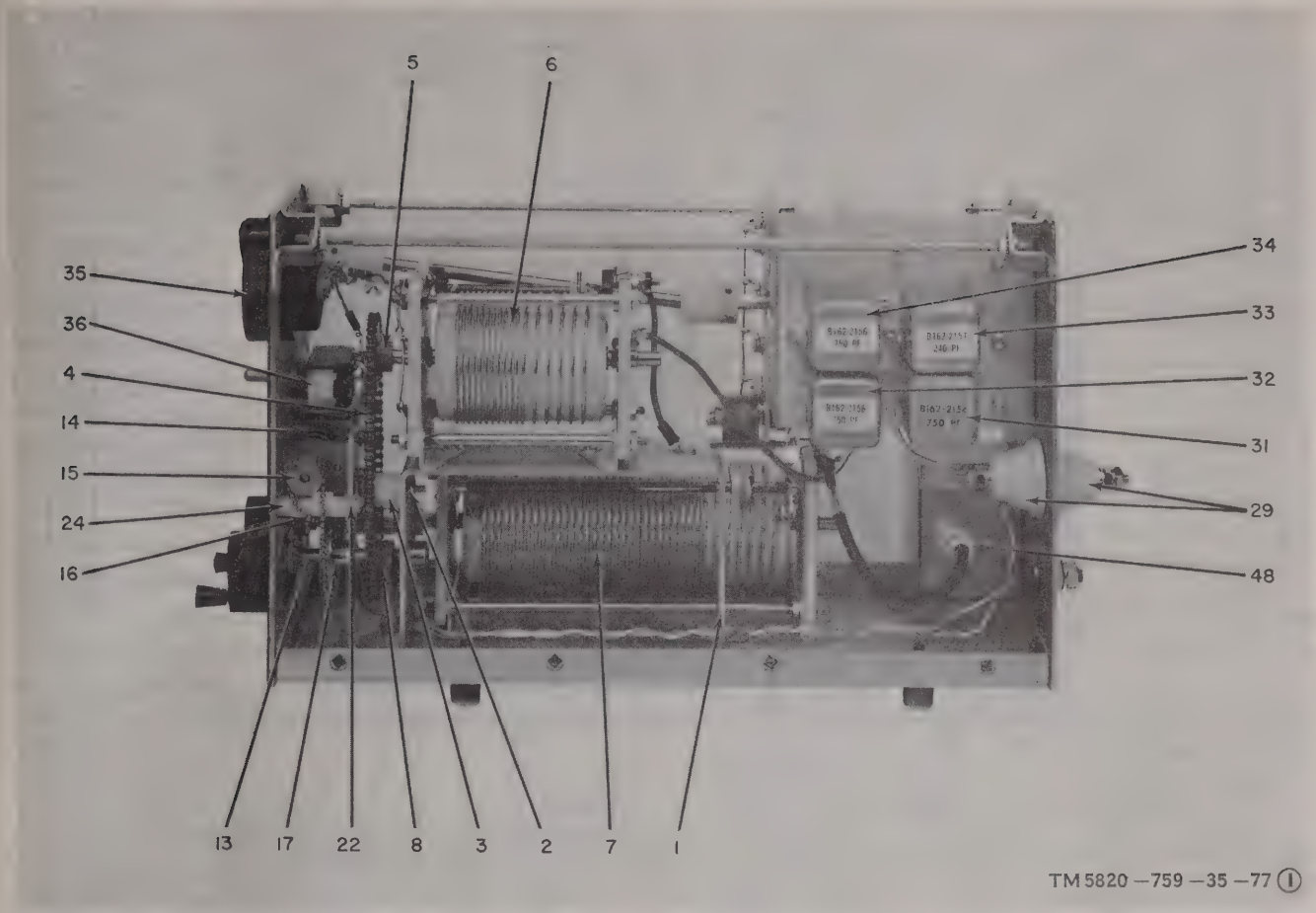
(3) At bottom of antenna coupler, remove two screws and hardware that secure coil 2L2 (7) to chassis. Slide coil 2L2 (7) towards rear of antenna coupler to disengage rigid shaft coupling (9) from flexible shaft coupling (10) and remove flexible shaft coupling (10). Tilt side of coil 2L2 (7) up and slide out of antenna coupler.

c. Rotary Switch 2S1 (fig. 4–4①, ②). To remove rotary switch 2S1 from the antenna coupler, proceed as follows:

(1) Refer to paragraph 2–12*a* and remove antenna coupler cover.

(2) At rigid shaft coupling (25), loosen setscrews and slide rigid shaft coupling (25) towards bracket (28) disengaging straight shaft (27) from rigid shaft coupling (26) and remove from antenna coupler.

(3) At rear solder terminal on coil 2L2 (7), unsolder buss wire.



1 Bracket
2 Nut
3 Ring spacer
4 Stud link chain
5 Sprocket wheel
6 Coil 2L1
7 Coil 2L2
8 Sprocket wheel
13 Shoulder shaft
14 Dial indicator
15 Sprocket wheel
16 Bead chain
17 Sprocket wheel
22 Indicator mounting plate
24 Sleeve spacer
29 Feed-through insulator 2J2
31 Capacitor assembly 2C3
32 Capacitor assembly 2C2
33 Capacitor assembly 2C4
34 Capacitor assembly 2C1
35 Wattmeter 2M1
36 Toggle switch 2S2
48 Coaxial connector 2J3

Figure 4–4(1). Coupler, Antenna CU–1782/GRC–165 parts location.

(4) At feed-through insulator 2J2 (29), disconnect buss wire.

(5) At antenna coupler back panel, remove two screws and lockwashers that secure bracket (28) to back panel. Remove bracket (28), with rotary switch 2S1 (30) and capacitors attached, from antenna coupler.

(6) At bracket (28), unsolder all capacitor leads from rotary switch 2S1 (30) terminals. Remove two nuts and hardware that secure rotary switch 2S1 (30) to bracket (28) and remove rotary switch 2S1 (30) from bracket (28).

d. Dial Indicators (fig. 4–4(1), (2)). To remove the dial indicators from the antenna coupler, proceed as follows:

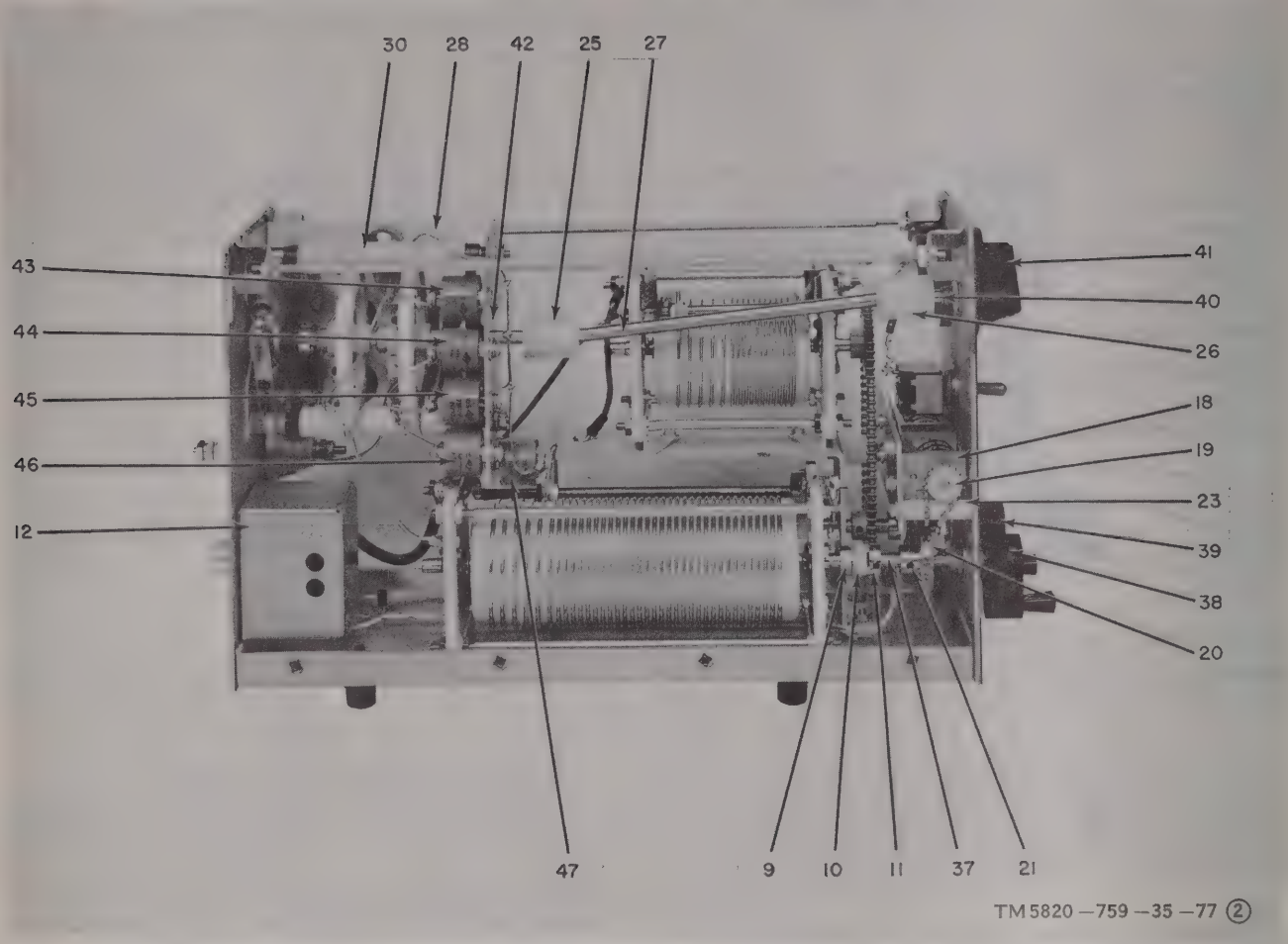
(1) Refer to paragraph 2–12*a* and remove antenna coupler cover.

(2) Refer to paragraph *a* above and remove coil 2L1 (6).

(3) Refer to paragraph *b* above and remove coil 2L2 (7).

(4) At bottom of antenna coupler, remove four screws and hardware that secure bracket (1) to chassis. Move bracket towards antenna coupler back panel to disengage shouldered shaft (13) from bracket (1) mounted bearing. Remove bracket (1) from antenna coupler.

(5) At dial indicator (14) shaft, loosen setscrew in sprocket wheel (15) and remove sprocket wheel (15) from dial indicator (14) shaft.



9 Rigid shaft coupling
10 Flexible shaft coupling
11 Rigid shaft coupling
12 Swr bridge 2A1
18 Dial indicator
19 Sprocket wheel
20 Bead chain
21 Sprocket wheel
23 Sleeve spacer
25 Rigid shaft coupling
26 Rigid shaft coupling
27 Straight shaft
28 Bracket
30 Rotary switch 2S1
37 Shoulder shaft
38 Hand crank
39 Hand crank
40 Shouldered shaft
41 Knob
42 Capacitor mounting plate
43 Fixed capacitor 2C19
44 Fixed capacitor 2C17
45 Fixed capacitor 2C18
46 Fixed capacitor 2C20
47 Fixed capacitor 2C21

Figure 4–4②. Coupler, Antenna CU–1782/GRC–165 parts locations.

(6) At dial indicator (18) shaft, loosen setscrew in sprocket wheel (19) and remove sprocket wheel (19) from dial indicator (18) shaft.

(7) At indicator mounting plate (22), remove two screws and hardware that secure indicator mounting plate (22) to sleeve spacers (23, 24). Remove indicator mounting plate (22) with dial indicators (14, 18) attached from antenna coupler.

4–7. Installation Procedures

The installation procedures for coil 2L1, coil 2L2, rotary switch 2S1, and dial indicators are outlined in the following paragraphs. The installation procedures for swr bridge 2A1 are contained in chapter 2 of this manual.

NOTE

After the appropriate installation procedures have been completed, refer to paragraph 4–4 and repeat the performance test. The procedures of the depot testing chapter of this manual should also be completed before returning the antenna coupler to stock.

a. Coil 2L1 (fig. 4–4①, ②). To install coil 2L1 in the antenna coupler, proceed as follows:

(1) Position sprocket wheel (5) on coil 2L1

(6) shaft (hub towards coil) so that setscrew is on flat portion of shaft. Edge of hub should be 3/8 inch from coil 2L1 (6) ceramic bracket. Tighten setscrew.

(2) Place coil 2L1 (6) on bracket (1) with sprocket wheel (5) towards front of antenna coupler. Secure coil 2L1 (6) to bracket (1) using two screws and hardware.

(3) Rotate coil 2L1 (6) shaft fully counterclockwise and set FINE TUNE dial indicator at 000. Place stud link chain (4) on sprocket wheels (5, 8). Loosen setscrew in sprocket wheel (8) and adjust so that stud link chain is in a straight line and tighten setscrew. Take up slack in stud link chain (4) by rotating ring spacer (3) and tighten nut (2).

(4) At front solder terminal on coil 2L1, solder white/blue wire and resistor.

(5) At rear screw terminal on coil 2L1 (6) connect red ground wire.

(6) At rear screw terminal on coil 2L2 (7), connect red wire from rear solder terminal on coil 2L1 (6).

b. Coil 2L2 (fig. 4–4①, ②). To install coil 2L2 in the antenna coupler, proceed as follows:

(1) At antenna coupler front panel, set LOAD dial indicator at 000.

(2) Rotate coil 2L2 (7) shaft fully counterclockwise to position roller against front stop. Slide coil 2L2 (7) into antenna coupler, with rigid shaft coupling (9) towards antenna coupler front panel. Place flexible shaft coupling (10) on rigid shaft coupling (11). Slide coil 2L2 (7) towards antenna coupler front panel to engage rigid shaft coupling (9) with flexible shaft coupling (10). Secure coil 2L2 (7) to chassis using two screws and hardware.

(3) At rear of coil 2L2 (7) solder buss wire to solder terminal. Connect coaxial wire and red wire to screw terminal.

c. Rotary Switch 2S1 (fig. 4–4①, ②). To install rotary switch 2S1 in the antenna coupler, proceed as follows:

(1) Secure rotary switch 2S1 (30) to bracket (28) with two nuts and flatwashers. Solder capacitor leads to rotary switch 2S1 (30) terminals.

(2) Position bracket (28) with rotary switch 2S1 (30) and capacitors attached on rear panel of antenna coupler and secure using two screws and lockwashers.

(3) At rear solder terminal on coil 2L2 (7), solder buss wire from rotary switch 2S1 (30).

(4) At feed-through insulator 2J2 (29), connect buss wire from rotary switch 2S1 (30).

(5) At rotary switch 2S1 (30), rotate shaft fully clockwise and slide rigid shaft coupling (25) onto switch shaft.

(6) At antenna coupler front panel, set COARSE TUNE control at 10.

(7) Slide straight shaft (27) into rigid shaft coupling (26).

(8) At rotary switch 2S1 (30) shaft, slide rigid shaft coupling (25) towards antenna coupler front panel engaging straight shaft (27). Tighten setscrews in rigid shaft coupling (25).

d. Dial Indicators (fig. 4–4①, ②). To install the dial indicators in the antenna coupler, proceed as follows:

(1) At back of front panel secure indicator mounting plate (22), with dial indicators (14, 18) attached, to sleeve spacers (23, 24) using two screws, lockwashers, and flatwashers.

(2) At right-hand side of antenna coupler, place bead chain (16) on sprocket wheel (17) and sprocket wheel (15) with sprocket wheel (15) hub towards rear of antenna coupler. Rotate sprocket wheel (15) to the left and slide, hub first, onto dial indicator (14) shaft and position so that front of sprocket wheel (15) is even with chassis side rail. Tighten setscrews. Bead chain (16) must be to rear of pin in sleeve spacer (24).

(3) At left-hand side of antenna coupler, place bead chain (20) on sprocket wheel (21) and sprocket wheel (19) with sprocket wheel (19) hub towards front of antenna coupler. Rotate sprocket wheel (19) to the left and slide, hub first, onto dial indicator (18) shaft and position so that front of sprocket wheel (19) is even with chassis side rail. Tighten setscrews. Bead chain (16) must be to rear of pin in sleeve spacer (23).

(4) Place bracket (1) in antenna coupler and move bracket (1) towards front panel so that bracket (1) mounted bearing slides over shouldered shaft (13). Secure bracket (1) to chassis using four screws and hardware.

(5) Refer to *b* above and install coil 2L2 (7).

(6) Refer to *a* above and install coil 2L1 (6).

CHAPTER 5

DEPOT MAINTENANCE CONTROL, RADIO SET C–7648/GRC–165

5–1. General

The depot maintenance procedures for the remote control are outlined in this chapter. These procedures are prepared for use by Depot Maintenance Shops for remote control units that have been removed from service for repair.

5–2. Test Equipment and Fabricated Connectors

The test equipment required for the remote control depot maintenance procedures is listed in *a* below. The test connectors that must be fabricated are explained in *b* and *c* below and are illustrated in figure 5–1.

a. Test Equipment.

Equipment	Qty	Technical manual
Multimeter AN/URM–105	1	TM 11–6625–203–12
Oscilloscope AN/USM–281A	1	TM 11–6625–1703–15
Signal Generator AN/URM–127	1	TM 11–6625–683–15
Battery Charger PP–1451/G	1	TM 11–6130–236–12
Resistor 1,000 ohms, 1/2 W	1	

b. Fabricated Connector, RF No. 425–0694 (fig. 5–1A).

(1) Obtain a multipin connector (RF Communications No. P–0401), a 600 ohm, 2 watt resistor R1, and one foot each of red, black, white, and green number 22 gauge wire.

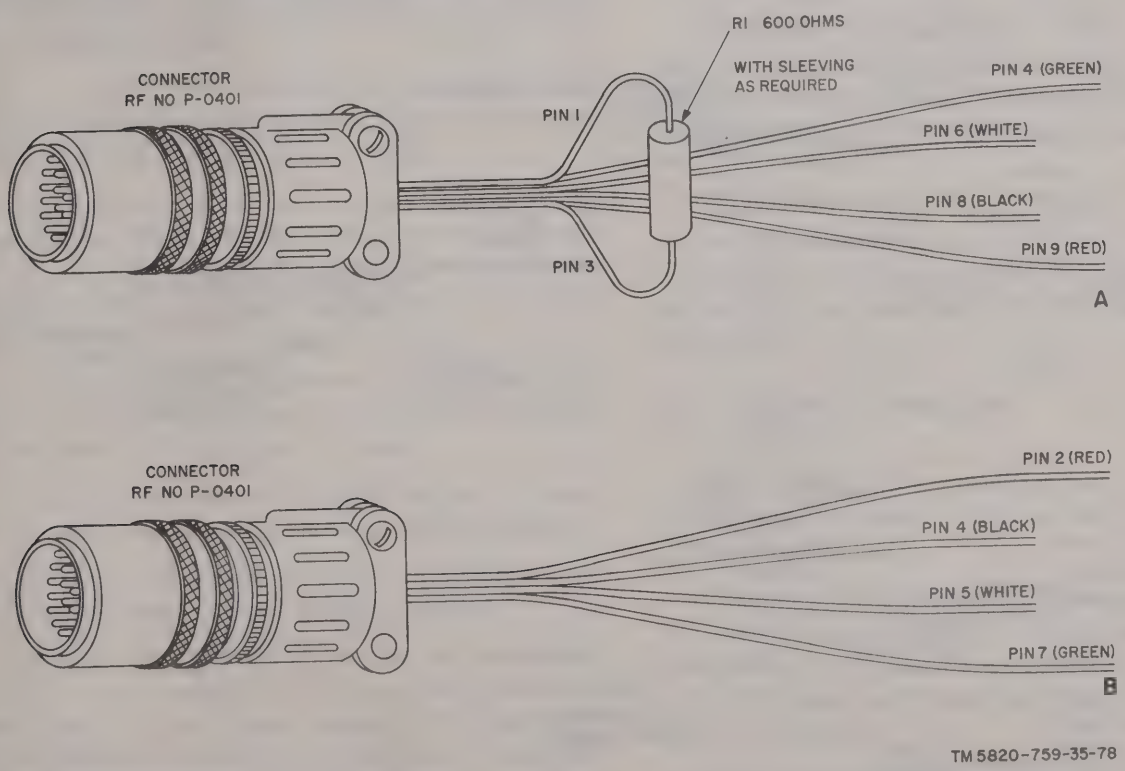


Figure 5–1. Test connectors, fabrication.

(2) Assemble the connector, resistor R1, and the wire as shown in figure 5–1A.

c. Fabricated Connector, RF No. 425–0695 (fig. 5–1B).

(1) Obtain a multipin connector (RF Communications No. P–0400) and one foot each of red, black, and green number 22 gauge wire.

(2) Assemble the connector and wire as shown in figure 5–1B.

5–3. General Parts Replacement Techniques

The components on the remote control can be reached and replaced easily without special procedures, however, the following general precautions do apply:

a. Careless replacement of components can cause faults.

b. Before a component is unsoldered, note the position of the leads. When replacing components, use the same length and dress of the leads as were originally used.

c. Be careful not to damage other leads or components by pushing or pulling them out of the way.

d. Do not allow drops of solder to fall into the unit.

e. A carelessly soldered connection may create a new fault. It is important to solder connections properly because a poorly soldered connection is one of the most difficult faults to find.

5–4. Performance Test

a. Refer to paragraph 2–13*a* and remove the cover from the remote control.

b. Connect test equipment as shown in figure 5–2.

c. At remote control, set Function switch at HANDSET and VOLUME control fully clockwise.

d. At rear panel connector J2, connect AN/URM–127 output across pins 4 and 6. Adjust AN/URM–127 output for a 1,000 Hz, 0.75 volts peak-to-peak signal.

e. At PP–1451/G battery charger, adjust output to +12 Vdc. The AN/URM–105 multimeter should indicate 380 ±20 ma.

f. Connect the AN/USM–281 oscilloscope probe to Function switch S1 terminal 2 and ground probe to terminal 8. The AN/USM–281 should display a clean, undistorted 6.0 ±1 volts peak-to-

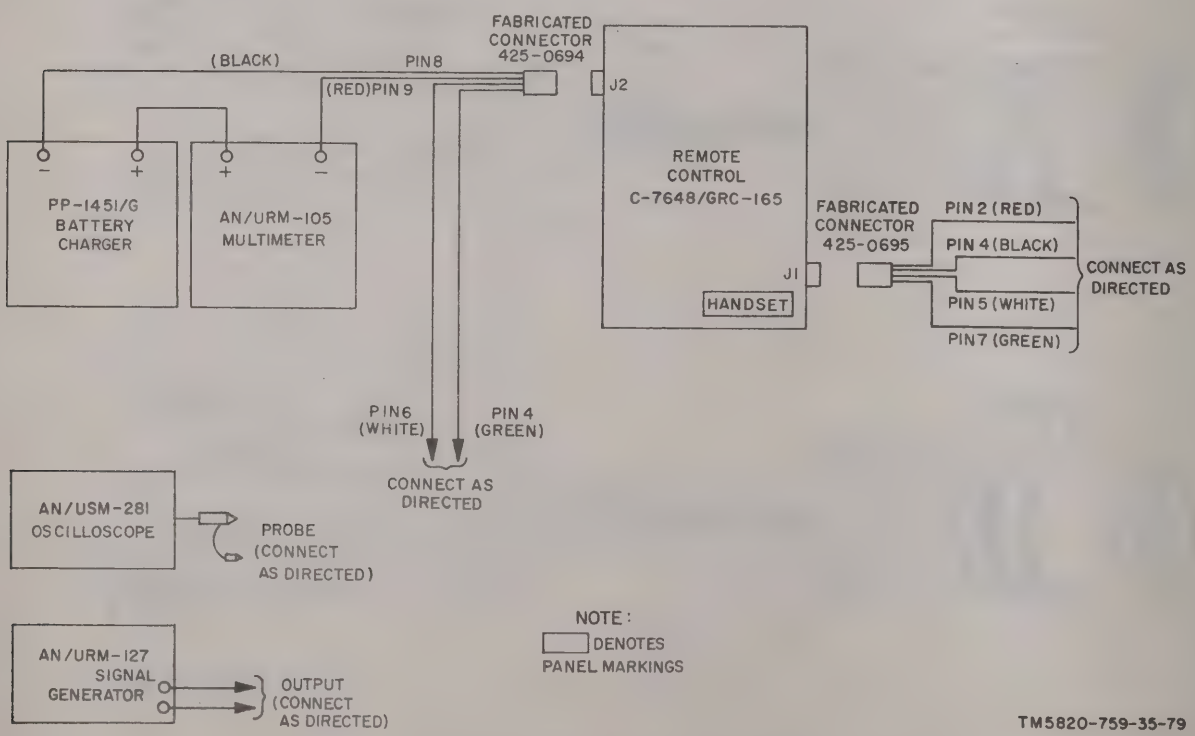


Figure 5–2. Control, Radio Set C–7648/GRC–165 test setup.

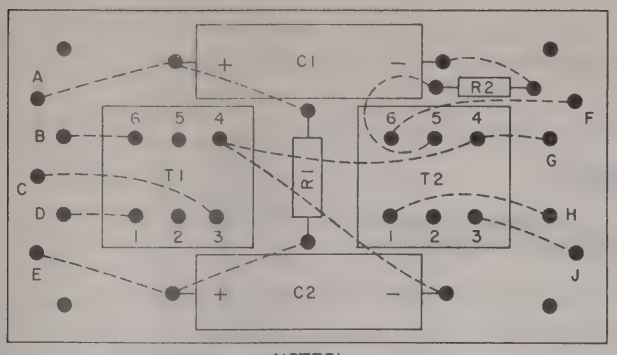


Figure 5–3. Transformer assembly A2 component locations.

peak waveform. Rotate VOLUME control counterclockwise and observe that the waveform is gradually reduced to zero and that no noise spikes are observed.

g. Set Function switch at PARALLEL and adjust VOLUME control clockwise for a comfortable audio level. Observe that the audio tone is clear and undistorted.

h. At HANDSET connector J1, connect the AN/URM–127 output across pins 5 and 4. Adjust output level to 10 volts peak-to-peak.

i. At remote control transformer assembly A2, connect the AN/USM–281 probe across terminals H and J, figure 5–3. The AN/USM–281 should display a clean, undistorted waveform of 8.0 volts peak-to-peak.

j. At HANDSET connector J1, connect the AN/URM–127 output across pins 2 and 4. Adjust output level to 30 volts peak-to-peak.

k. The AN/USM–281 should display a clean, undistorted waveform of 1.0 volts peak-to-peak.

l. Set VOLUME control at OFF and disconnect all test equipment from the remote control.

m. Using the AN/URM–105 as an ohmmeter (R X 1 scale), measure for an open circuit between pin 7 of rear panel connector J2 and pin 7 of HANDSET connector J5. Rotate VOLUME control clockwise out of the OFF detent and observe an indication of less than 1 ohm on the AN/URM–105.

5–5. Transformer Assembly A2

The troubleshooting procedures for transformer assembly A2 are outlined below. After the faulty component has been isolated, refer to paragraph 5–3 for general repair instructions. Because alignment procedures are not required for transformer assembly A2, repeat the troubleshooting steps after replacing the faulty component to check for proper operation.

a. Connect all equipment as shown in figure 5–4 and energize. Connect 1,000 ohm ½ watt resistor across terminals B and G.

b. Connect AN/URM-127 audio signal generator output to pins D and C, figure 5–3. Adjust output for 1000 Hz at 1.0 volts peak-to-peak.

c. Connect AN/USM-281 oscilloscope probe across 1,000 ohm resistor. The AN/USM–281 should display a clean, undistorted 0.8 volts peak-to-peak waveform.

d. Connect AN/USM-281 probe to terminal H and ground to terminal J.

e. Connect AN/URM–127 output across terminals F and G. Adjust output level to 10 volts peak-to-peak. The AN/USM–281 should display a clean, undistorted 8.0 volts peak-to-peak waveform.

f. Connect AN/URM–127 output across terminals A and G. Adjust output to 30 volts peak-to-peak. The AN/USM–281 should display a clean, undistorted 1.0 volts peak-to-peak waveform.

5–6. Audio Amplifier Assembly A1

Audio amplifier assembly A1 is identical to af amplifier 1A16 used in the rt unit. Therefore, refer to paragraph 3–22 for the troubleshooting procedures.

5–7. Removal Procedures (fig. 2–8)

To remove audio amplifier assembly A1 and transformer assembly A2 from the remote control proceed as follows:

a. Audio Amplifier Assembly A1.

(1) Pull up on the circuit board to slide the assembly up and out of the mounting bracket.

(2) Disconnect multipin connector P1 from the circuit board.

b. Transformer Assembly A2.

(1) Tag and unsolder the wires from the terminals on the assembly.

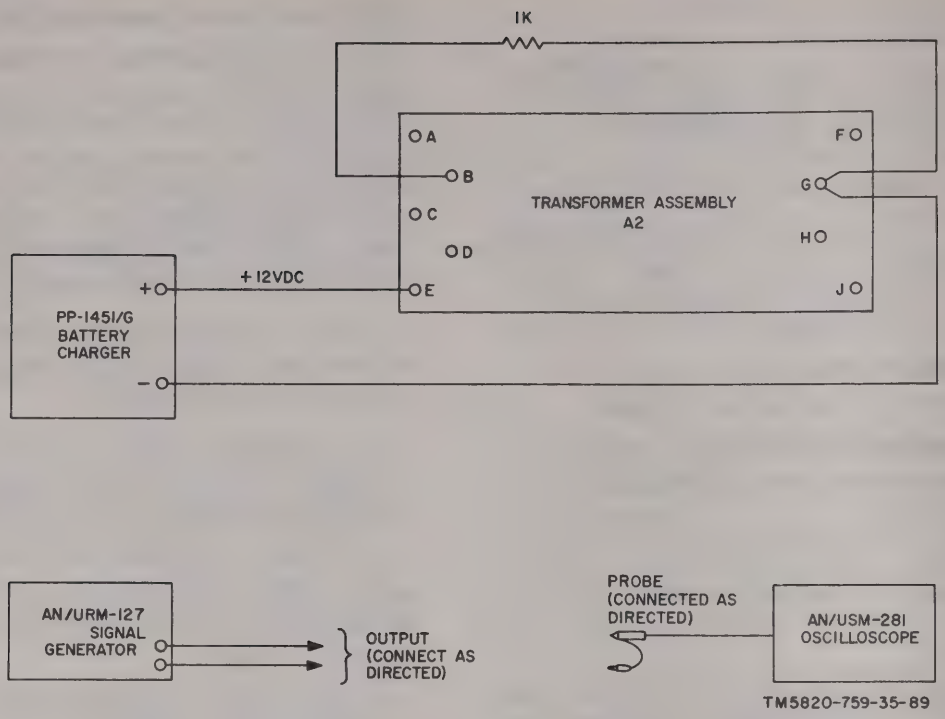


Figure 5-4. Transformer assembly A2 test setup.

(2) At the bottom of the remote control, remove the four Phillips head screws that secure the assembly to the unit and remove the assembly.

5-8. Installation Procedures

Reverse the removal procedures outlined in paragraph 5-7 to install audio amplifier assembly A1 and transformer assembly A2 into the remote control. Repeat the performance test in paragraph 5-4 after replacing an assembly to verify the operation of the remote control.

CHAPTER 6

DEPOT OVERHAUL STANDARDS

6–1. Applicability of Depot Overhaul Standards

a. The tests outlined in this chapter are designed to measure the performance capability of a repaired equipment. Equipment that is to be returned to stock should meet the standards given in these tests.

b. Applicable procedures of the Army depots performing these tests and the general standards for repaired electronic equipment given in TB SIG 355–1, TB SIG 355–2, and TB SIG 355–3 form a part of the requirements for testing this equipment.

c. Perform the tests in the order in which they are given, and observe that the results meet the minimum standard indicated in each test.

d. All subassemblies repaired at the depot level must be installed in the radio set in order to perform these tests. Refer to chapter 2 for subassembly installation procedures.

6–2. Test Equipment and Special Items Required

The test equipment required for depot testing is listed in *e* below. Additional items such as test connectors and attenuators must be fabricated. Fabrication details are covered in *a* through *d* below and in figure 6–1.

a. Fabricated Connector, RF No. 425–0681 (fig. 6–1A).

(1) Obtain a multipin connector (RF Communications No. P–0401), a 600 ohm, 2 watt resistor R1, and two pieces of sleeving.

(2) Assemble the connector, sleeving, and R1 as shown in figure 6–1A.

b. Fabricated Attenuator, RF No. 425–0682 (fig. 6–1B).

(1) Obtain a UG–88/U BNC connector, a UG–657/U BNC connector, a 68 k-ohm, ⅛ watt resistor R1, and a 51 ohm, ⅛ watt resistor R2.

(2) Assemble the connectors, resistor R1, and resistor R2 as shown in figure 6–1B.

c. Fabricated Connector, RF No. 425–0683 (fig. 6–1C).

(1) Obtain a multipin connector (RF Communications No. P–0401), two 4-foot pieces of white and red number 22 gauge wire, and a 1 inch piece of buss wire.

(2) Assemble the connector and wire as shown in figure 6–1C.

d. Fabricated Connector, RF No. 425–0684 (fig. 6–1D).

(1) Obtain a multipin connector (RF Communications No. P–0401) and 6 inches each of red and white number 22 gauge wire.

(2) Assemble the connector and wire as shown in figure 6–1D.

e. Test Equipment.

Equipment	Step	Technical manual
Multimeter ME–26(*)/U	1	TM 11–6625–200–15
Voltmeter, Electronic ME–30(*)/U.	1	TM 11–6625–320–15
Generator, Signal AN/GRM–50	1	TM 11–6625–573–15
Counter, Electronic, Digital Readout AN/USM–207.	1	TM 11–6625–700–10
Dummy Load, Electrical DA–75/U.	1	TM 11–6625–446–15
Microphone M–143/GR	1	
Rf Bridge GR–1606A	1	
Signal Generator AN/URM–127	2	TM 11–6625–683–15
Transmission Test Set AN/USM–306	1	TM 11–6625–1748–12 (To be published).
AS–2203/GRM–90 Antenna	1	TM 11–5820–759–12
Probe, Scope HP–11047A	1	
Probe, T–Connector HP–11042A	1	
Oscilloscope AN/USM–281	1	TM 11–6625–1703–15
Test Set, Radio AN/GRM–90	1	
Attenuator, Kay Electric Co. 30–0	1	
Variable Transformer GE model 9T92Y5.	1	

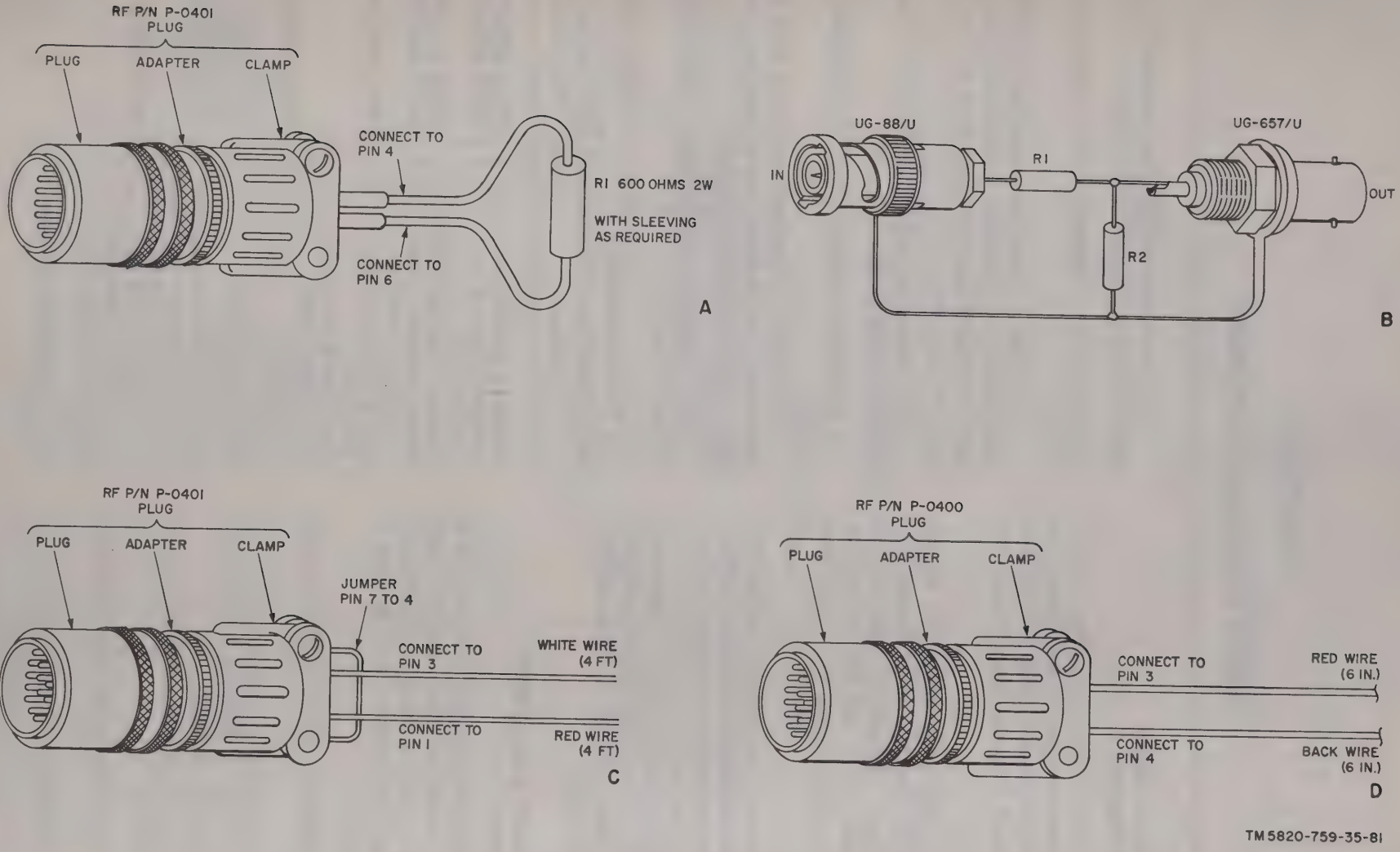


Figure 6–1. Test connection and attenuators, fabrications.

f. Additional Equipment.

(1) Adapter UG–201/U.
(2) Adapter UG–273/U.
(3) Adapter GR 874–QBPA.
(4) Adapter GR 874–QUP.
(5) Adapter GR 874–QUJ.
(6) Adapter GR 874–PB58A.
(7) Patch cord GR 874–R22A.
(8) BNC T-Connector.
(9) Cable W2 (CX–10820/GR).
(10) Cable W4 (CX–10823/GR).
(11) Cable W5 (CG–3467/U).
(12) Cable W6 (CX–10817/U).
(13) Cable W7 (FSN 6150–617–1470).

6–3. Rt Unit Audio Distortion Test

a. Connect the test equipment as shown in figure 6–2 and turn power on.

b. Refer to paragraph 2–12*a* and remove the top cover from the rt unit. Connect the ac probe of the ME–26(*)/U and the AN/USM–281 oscilloscope probe to the 1LS1 speaker terminal with the green wire. Ground probes to remaining terminal (black wire).

c. At AN/GRM–50 rf signal generator adjust for a 3.103 MHz cw output signal at 5 uv amplitude.

d. At rt unit tune in usb mode for 3103 kHz. Set RF GAIN and RECEIVER AUDIO controls fully clockwise.

e. Fine tune AN/GRM–50 frequency control for maximum output on ME–26(*)/U.

f. While observing AN/USM–281 displayed waveform, advance AN/GRM–50 output level until waveform just begins to distort. Record the voltage indicated on the ME–26(*)/U.

g. The recorded voltage must be greater than 2.4 Vac.

6–4. Rt Unit Stability Test

a. Connect the test equipment as shown in figure 6–3 and turn power on.

b. Connect ac probe of ME–26(*)/U across output of variable transformer 9T92Y5 (or equivalent) and adjust for 115 Vac.

c. At rt unit, set FUNCTION switch at STBY and allow 20 minutes for warm-up.

d. Tune rt unit in am. transmit mode at 10,000 kHz.

NOTE

Make sure that the 1 kHz FREQUENCY KILOCYCLES control is in detent.

e. Key rt unit and record frequency as displayed on AN/USM–207. Unkey rt unit. The measured frequency must be 10,000,000 MHz ±10 Hz.

f. At rt unit, energize vfo mode by carefully pulling out on 1 kHz FREQUENCY KILOCYCLES control without rotating the control.

g. Key rt unit and record frequency as displayed on AN/USM–207. Unkey rt unit.

NOTE

The frequency recorded in step *g* above

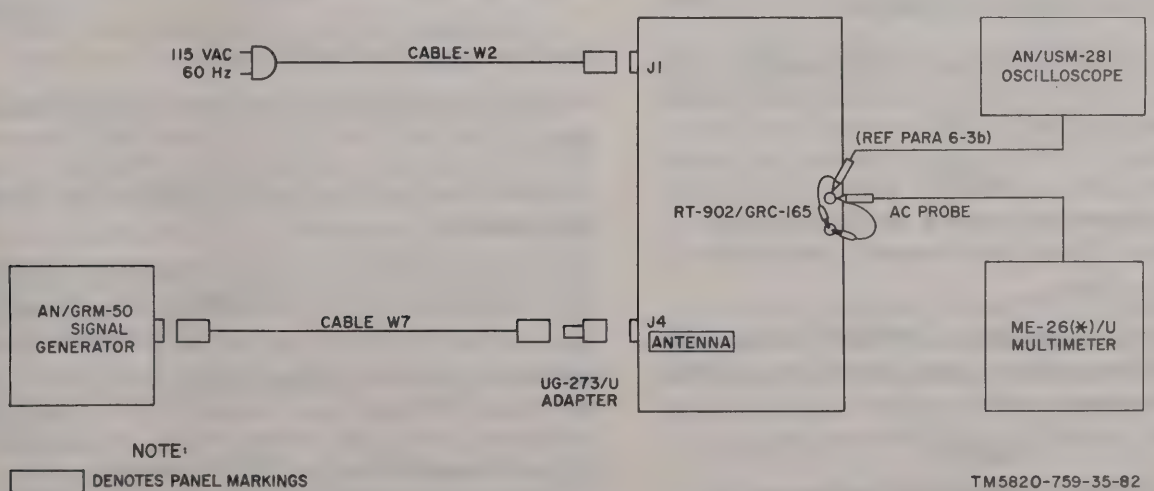


Figure 6–2. Receiver-Transmitter, Radio RT–902/GRC–165 audio distortion test.

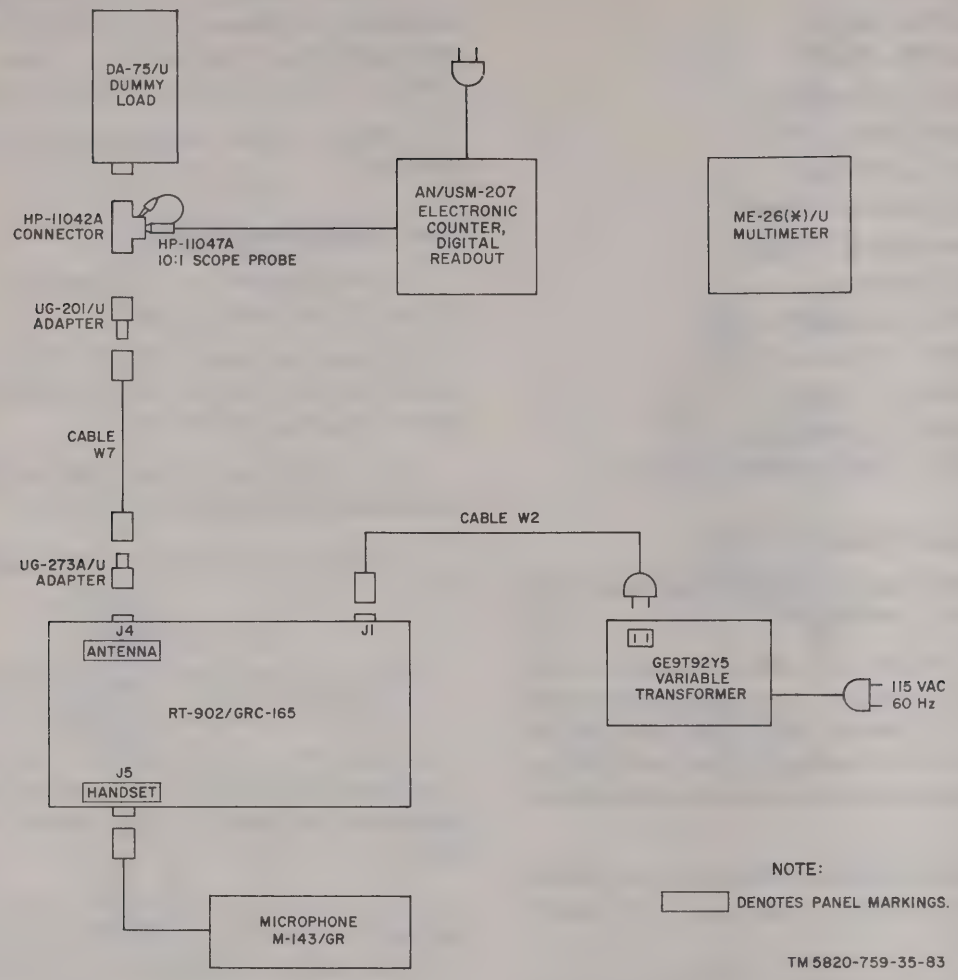


Figure 6–3. Receiver-Transmitter, Radio RT–902/GRC–165 stability test.

must be within ±1500 Hz of the frequency recorded in step *e* above.

h. At variable transformer 9T92Y5, adjust output to 103.5 vac with the rt unit keyed. Record frequency and unkey rt unit.

NOTE

The frequency in step *h* above must be within 40 Hz of the frequency recorded in step *e* above.

i. At variable transformer 9T92Y5, adjust output to 126.5 Vac with rt unit keyed. Record frequency and unkey rt unit.

NOTE

The frequency in step *i* above must be within 40 Hz of the frequency recorded in step *e* above.

6–5. Rt Unit Selectivity Test

a. Connect the test equipment as shown in figure 6–4 and turn power on.

b. At the attenuator, switch in 30 db of attenuation.

c. At rt unit, tune to 3103 kHz in the am. receive mode.

d. At AN/GRM–50, tune to 3.103 MHz and fine tune frequency for a peak ME–26(*)/U indication. At AN/GRM–50, adjust output level for an indication on the ME–6(*)/U just below agc threshold. Measure and record this frequency as indicated on the AN/USM–207 to six significant figures. Record ME–26(*)/U indication.

e. At the attenuator, switch out 6 db of attenuation.

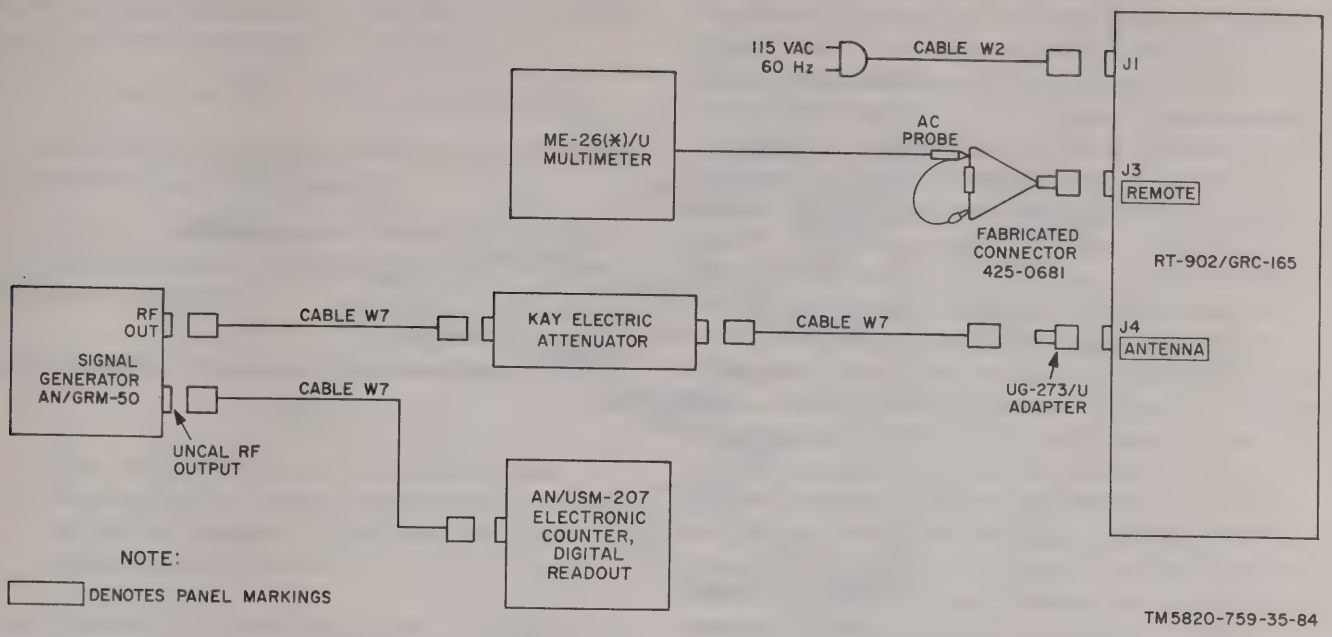


Figure 6–4. Receiver-Transmitter, Radio RT–902/GRC selectivity test.

f. At the AN/GRM–50, increase frequency until the ME–26(*)/U returns to the value recorded in step *d* above. Measure and record this frequency using the AN/USM–207.

g. At the AN/GRM–50, decrease frequency going past original setting until the ME–26(*)/U returns to the value recorded in step *d* above. Measure and record this frequency using the AN/USM–207.

h. Subtract the frequency of step *g* above from step *f* above. The difference should be 11 kHz nominal.

i. At rt unit, set FUNCTION switch at LSB.

j. At the attenuator, switch in 6 db of attenuation and fine tune AN/GRM–50 frequency for a peak ME–26(*)/U indication. At AN/GRM–50, adjust output level for an indication on the ME–26(*)/U just below agc threshold. Measure and record this frequency as indicated on the AN/USM–207 to six significant figures. Record ME–26(*)/U indication.

k. At the attenuator, switch out 6 db of attenuation.

l. At the AN/GRM–50, increase frequency until the ME–26(*)/U returns to the value recorded in step *j* above. Measure and record this frequency using the AN/USM–207.

m. At the AN/GRM–50, decrease frequency going past original setting until the ME–26(*)/U returns to the value recorded in step *j* above. Measure and record this frequency using the AN/USM–207.

n. Subtract the frequency of step *m* above from step *l* above. The difference should be 3.250 kHz ±250 Hz.

o. At rt unit, set FUNCTION switch at USB. Repeat steps *j* through *n* above.

6–6. Rt Unit Final Amplifier Rf Output

a. Refer to figure 2–1 (transmit), connect the test equipment, and turn power on.

b. Tune rt unit to 3103 kHz in the cw transmit mode for maximum output. The minimum acceptable output is 70.7 Vac and the front panel meter must indicate 100, —10 +50 watts. Unkey rt unit.

c. At rt unit, set FUNCTION switch at AM. Key rt unit and adjust TRANSMIT AUDIO control maximum clockwise while speaking into the M–143/GR microphone. On voice peaks, the rf output must be over 70 Vac. Unkey rt unit.

d. Cover M–143/GR microphone (to prevent modulation) and key rt unit. The rf output (am. carrier) must be 37.5 Vac ±20%. Unkey rt unit.

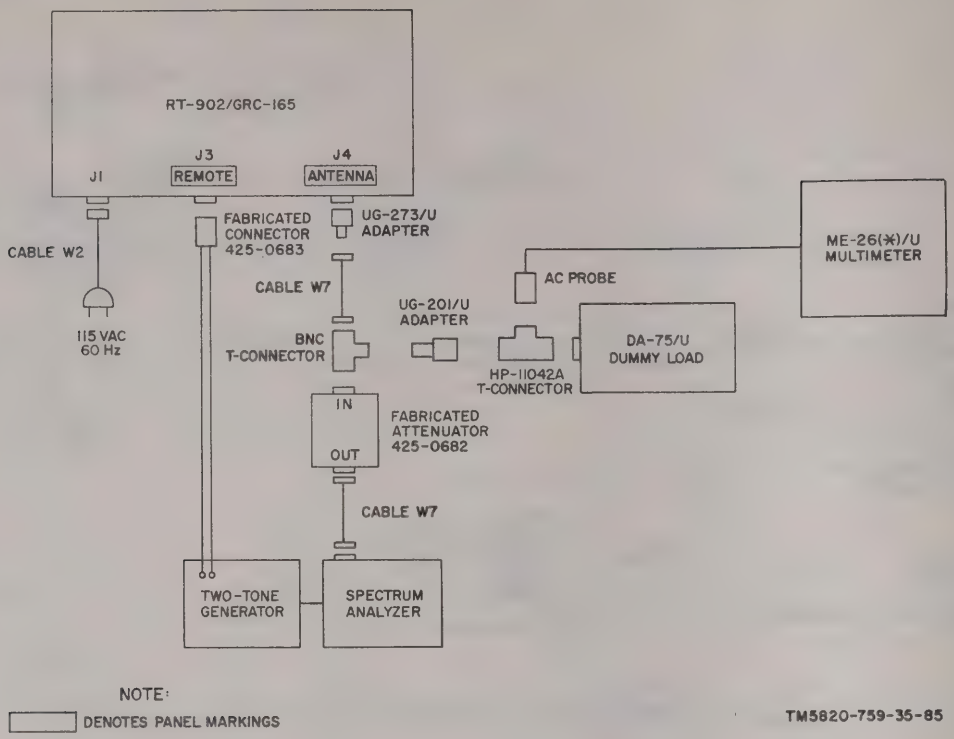


Figure 6–5. Receiver-Transmiter, Radio RT–902/GRC–165 undesired sideband suppression test.

e. Repeat step *c* above with the FUNCTION switch at LSB and USB positions. The peak output must be over 70 Vac. Unkey rt unit.

f. Repeat step *b* above with rt unit tuned to 14999 kHz.

6–7. Rt Unit Undesired Sideband Suppression Test

a. Connect the test equipment as shown in figure 6–5 and turn power on.

b. At the spectrum analyzer, set the following controls to the positions listed.

Control	Position
IF ATTEN	20 db
GAIN	Clockwise
AMPLITUDE SCALE	LOG
RF TEST	OFF
AFC	OFF
CAL OCS LEVEL	OFF
FREQUENCY	2-4.5 MHz Band

c. At the two-tone generator, set the following controls to the positions listed.

Control	Position
OUTPUT	AB
OUTPUT LEVEL (both channels)	5 db
LEVEL	Midrange A and B
OUTPUT TERMINALS	NORMAL
FREQUENCIES	(A) 900 Hz and (B) 1500 Hz

d. At rt unit, set FUNCTION switch at LSB and KEYLINE switch at LOCAL.

NOTE

With fabricated connector 425–0683 connected to 1J3 on rt unit, the rt unit is keyed by setting KEYLINE switch at LOCAL/REMOTE.

e. Tune rt unit to 3103 kHz in lsb transmit mode. Unkey rt unit.

f. At two-tone generator, switch off 1500 Hz tone B.

g. Key rt unit and adjust TRANSMIT AUDIO control for a ME–26(*)/U indication of 36 Vac. Adjust spectrum analyzer for a transmit signal display.

h. With rt unit keyed, measure undesired sideband. The sideband must be at least 50 db down from the center frequency. Unkey rt unit.

i. At rt unit, set FUNCTION switch at USB.

j. At two-tone generator, switch off 900 Hz tone A and switch on 1500 Hz tone B.

k. Key rt unit and measure undesired sideband. The sideband must be at least 50 db down from the center frequency.

6–8. Receiver Spurious Emission Test

NOTE

This test determines percentage of usable channels by actual measurement of all 13,000 channels. Time required for this test is about 8 hours.

a. Connect the test equipment as shown in figure 6–6 and turn power on.

b. Measure and record receive signal-to-noise ratio in all MHz frequency increments plus 500 kHz (thus: 2.500 MHz, 3.500 MHz, 4.500 MHz, etc.). To determine signal-to-noise ratio at any of these frequencies, tune rt unit to desired frequency in cw mode and listen for a spurious signal identified by an audible tone (whistle). If no spurious signal is present, signal-to-noise ratio test can be made at that frequency. Tune AN/GRM–50 to the rt unit frequency and set output at 0.5 uv in the cw mode. Fine tune AN/GRM–50 for peak ME–30(*)/U indication. Record indication and proceed to next reference frequency.

c. With all reference signal-to-noise ratio tests completed, tune rt unit to 2000 kHz and observe ME–30(*)/U indication, and also listen for audible signal. If a significantly large spurious signal is present, ME–30(*)/U will indicate relative amplitude and an audible tone will be heard. If the ME–30(*)/U indication is nearly as large or greater than indications obtained during measurement of reference signal-to-noise ratio for same MHz frequency band, tune rt unit 1 kHz off spurious signal frequency. If a spurious signal is present at this frequency (spurious signal frequency ±1 kHz), tune the rt unit to next channel. The closest usable channel to the spurious channel is used for measurement. With the rt unit tuned to the first usable channel, tune the AN/GRM–50 to rt unit receive frequency for peak ME–30(*)/U indication and adjust AN/GRM–50 output signal amplitude for same ME–30(*)/U indication as was recorded with the spurious signal. Record the AN/GRM–50 output amplitude for the spurious signal frequency.

d. Locate next spurious channel in the same manner described in *c* above and use the same methods to measure the spurious signal. Continue through all channels of this MHz frequency band and then go on to the next MHz frequency band (3 MHz) where the corresponding reference signal-to-noise ratio (3.5 MHz) is used. Repeat tests in all channels of all MHz frequency bands.

e. When tests are completed for all channels, total the number of channels where the spurious signal was greater than the reference signal-to-noise signal of 0.5 uv. The total must be less than 260 channels.

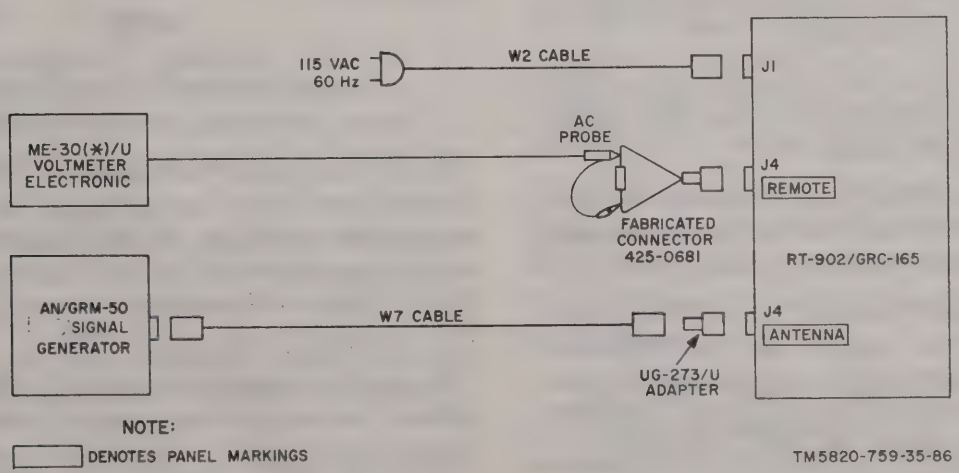


Figure 6–6. Receiver-Transmitter, Radio RT–902/GRC–165 spurious emissions test.

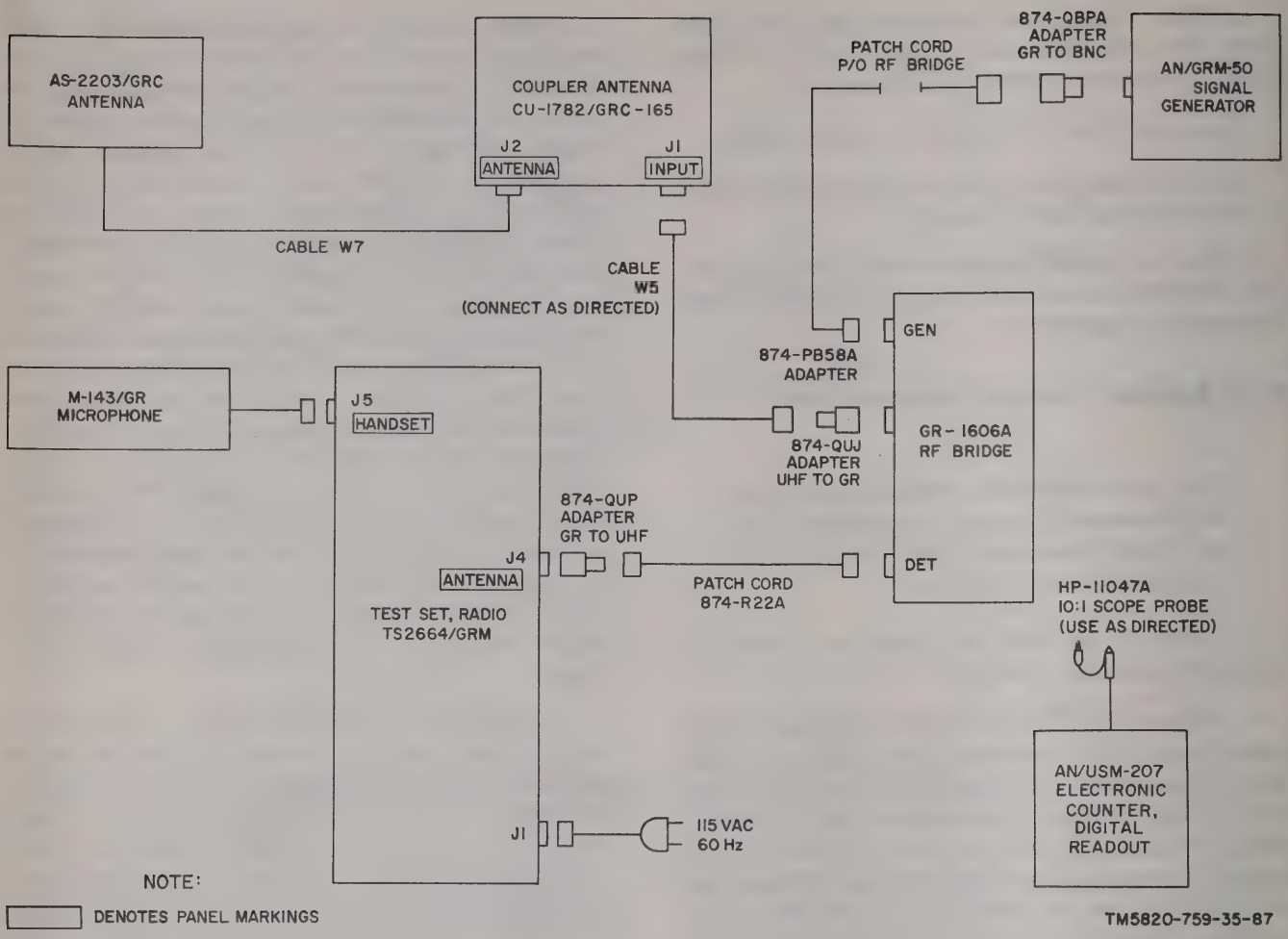


Figure 6–7. Coupler, Antenna CU–1782/GRC–165 transmission line impedance test.

6–9. Antenna Coupler Transmission Line Impedance Test

a. Connect the test equipment as shown in figure 6–7 and turn power on.

b. Connect ANTENNA connector 1J4 on TS–2664/GRM–90 to INPUT connector 2J1 on antenna coupler by using cable W5.

c. At TS–2664/GRM–90 and antenna coupler, tune to 2000 kHz in the cw mode. Adjust antenna coupler for minimum reflected power.

d. Connect the AN/USM–207 to ANT connector 2J2 on the antenna coupler, key the TS–2664/GRM–90 in the am. mode and record the frequency to six significant figures. Unkey TS–2664/GRM–90 and disconnect the AN/USM–207.

e. Using the AN/USM–207, set the AN/GRM–50 to the exact frequency recorded in *d* above. Set output signal for cw at 20 dbm.

f. At TS–2664/GRM–90, disconnect M–143/GR microphone and connect test equipment as shown in figure 6–7.

NOTE

In the following paragraphs, the TS–2664/GRM–90 is utilized as the detector for the GR–1606A rf bridge.

g. At the input terminals of GR–1606A rf bridge, short the input terminals. Set Initial-Balance range switch at HIGH, REACTANCE dial at 5000, and RESISTANCE dial to 0. Adjust INITIAL BALANCE controls for a null on the TS–2664/GRM–90 front panel meter.

h. At the input terminals of GR–1606A rf bridge, remove short and connect antenna coupler using cable W5 and a GR 874–QUJ adapter.

i. Null TS–2664/GRM–90 front panel meter using the REACTANCE and RESISTANCE controls on GR–1606A. Read resistance value directly

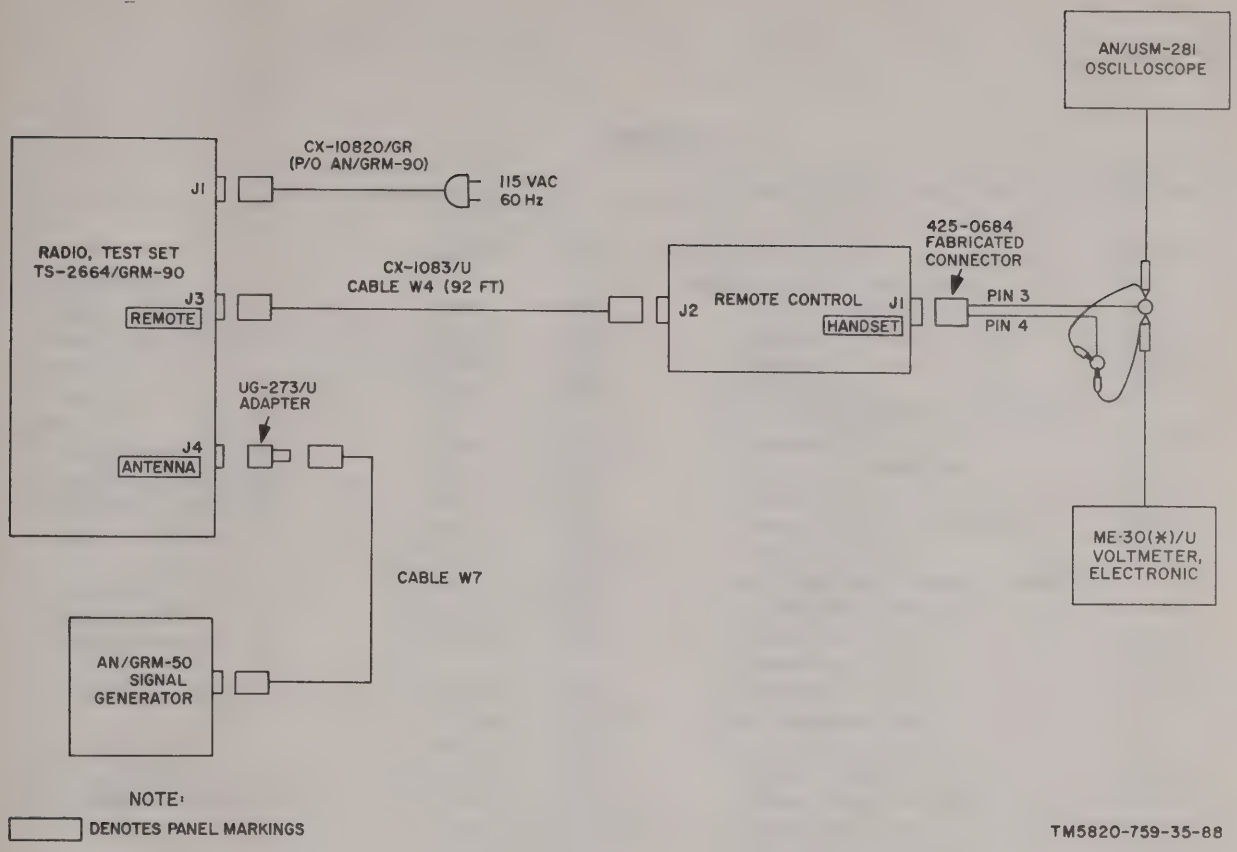


Figure 6–8. Control, Radio Set C–7648/GRC–165 audio amplifier noise and distortion test.

from RESISTANCE control. Subtract final reactance reading from 5000 and divide by two for reactance value.

j. The resistive impedance should be 50 ohms ±10%, and the reactive impedance should be less than two ohms.

6–10. Remote Control Noise and Distortion Test

a. Connect the test equipment as shown in figure 6–8.

b. At TS–2664/GRM–90, disconnect frequency mixer 1A8 and connect a jumper between pins H and K at 1A8P23. Reinstall frequency mixer 1A8.

c. Turn on the test equipment power and tune TS–2664/GRM–90 to 3103 kHz in the usb receive mode.

d. Disconnect AN/GRM–50 from TS–2664/GRM–90 ANTENNA connector J4.

e. At remote control, set FUNCTION switch at PARALLEL and VOLUME control fully clockwise. The ME–30(*)/U voltmeter should indicate less than 12 mvac.

f. At TS–2664/GRM–90, set FUNCTION switch at STBY. Remove jumper from pins H and K at 1A8P23 of frequency mixer 1A8. Reinstall frequency mixer 1A8. Set FUNCTION switch at AM and RF GAIN control fully clockwise.

g. Connect AN/GRM–50 to J4 ANTENNA connector on TS–2664/GRM–90 and tune to 3.103 MHz modulated 30% with a 1000 Hz tone. Fine tune frequency for a peak indication on TS–2664/GRM–90 meter.

h. At remote control, rotate VOLUME control clockwise until sine wave on AN/USM–281 begins to distort. The ME–30(*)/U should indicate more than 2.4 Vac.

Figures 6–9 through 6–21 are located in back of manual.

INDEX

	Paragraph	Page
AF Amplifier 1A16:		
Circuit analysis	1–25	1–21
Depot maintenance	3–22	3–55
Removal	2–11*r*	2–21
Replacement	2–14*p*	3–30
Alignment:		
Filter assembly 1A19	2–26	2–38
Frequency mixer 1A3	3–9	3–23
Frequency mixer 1A4	3–10	3–27
Frequency mixer 1A8	2–21, 3–14	2–35, 3–37
If. amplifier 1A7	3–13	3–33
Limiter 1A15	2–24	2–37
Rf amplifier 1A1	2–19, 3–7	2–32, 3–8
Rf oscillator 1A9	2–22, 3–15	2–35, 3–39
Rf oscillator 1A10	2–23	2–36
Rf oscillator 1A11	3–17	3–45
Rf oscillator 1A17	2–25	2–37
Synthesizer 1A2	2–20, 3–8	2–33, 3–19
Translator 1A6	3–12	3–30
Swr bridge 2A1	4–5	4–2
Antenna Coupler:		
General parts replacement techniques	4–3	4–2
Installation procedures	4–7	4–6
Coil 2L1	4–7*a*	4–6
Coil 2L2	4–7*b*	4–7
Cover	2–15*b*	2–32
Dial indicators	4–7*d*	4–7
Rotary switch 2S1	4–7*c*	4–7
Swr bridge	2–15*a*	2–32
Performance test	4–4	4–1
Removal procedures	4–6	4–4
Coil 2L1	4–6*a*	4–4
Coil 2L2	4–6*b*	4–4
Cover	2–12*a*	2–25
Dial indicators	4–6*d*	4–5
Rotary switch 2S1	4–6*c*	4–4
Swr bridge 2A1	2–12*b*	2–25
Theory:		
Description	1–33	1–25
Functional operation	1–34	1–25
General	1–32	1–25
Impedance matching network	1–36	1–26
Swr bridge 2A1	1–35	1–25
Applicability of depot overhaul standard	6–1	6–1
Audio Amplifier A1:		
Depot maintenance	5–6	5–3
Functioning of	1–40	1–26
Audio Distortion Test	6–3	6–3

	Paragraph	Page
Chopper 1A18A or 1A18B:		
Circuit analysis	1–27	1–21
Depot maintenance	3–24	3–57
Removal	2–11*t*	2–22
Replacement	2–14*r*	2–30
Circuit Analysis, Antenna Coupler:		
Description	1–33	1–25
Functional operation	1–34	1–25
General	1–32	1–25
Impedance matching network	1–36	1–26
Swr bridge 2A1	1–35	1–25
Circuit Analysis, Remote Control:		
Audio amplifier A1	1–40	1–26
Description	1–38	1–26
Functional operation	1–39	1–26
General	1–37	1–26
Circuit Analysis, Rt Unit:		
Af amplifier 1A16	1–25	1–21
Chopper 1A18	1–27	1–21
Filter assembly 1A19	1–28	1–23
Frequency 1A3	1–15	1–8
Frequency mixer 1A4	1–16	1–9
Frequency mixer 1A8	1–20	1–13
General	1–12	1–6
If. amplifier 1A7	1–19	1–12
Limiter 1A5	1–17	1–10
Limiter 1A14	1–23	1–19
Limiter 1A15	1–24	1–20
Meter circuits	1–31	1–25
Power amplifier	1–30	1–25
Power supply	1–29	1–24
Rf amplifier 1A1	1–13	1–6
Rf oscillator 1A9	1–21	1–14
Rf oscillators 1A10–1A13	1–22	1–14
Rf oscillator 1A17	1–26	1–21
Synthesizer 1A2	1–14	1–7
Translator 1A6	1–18	1–10
Cover removal:		
Antenna coupler	2–12*a*	2–25
Remote control	2–13*a*	2–25
Rt unit	2–11	2–14
Description:		
Antenna coupler	1–33	1–25
Remote control	1–38	1–26
Rt unit	1–8	1–2
Dial Indicators:		
Installation	4–7*d*	4–7
Removal	4–6*d*	4–5
Disassembly:		
Rf amplifier 1A1	3–7	3–8
Rf oscillator 1A10	3–16	3–41
Rf oscillator 1A11	3–17	3–45
Rf oscillator 1A12	3–18	3–48
Rf oscillator 1A13	3–19	3–50

	Paragraph	Page
Speed decreaser gear assembly 1MP70	3–26	3–61
Speed decreaser gear assembly 1MP71	3–27	3–64
Filter Assembly 1A19:		
Alignment	2–26	2–38
Circuit analysis	1–28	1–23
Depot maintenance	3–25	3–58
Removal	2–11*u*	2–22
Replacement	2–14*s*	2–30
Final Amplifier Rf Output	6–6	6–5
Frequency Conversion	1–11	1–4
Frequency Mixer 1A3:		
Circuit analysis	1–15	1–8
Depot maintenance	3–9	3–23
Alignment	3–9*b*	3–25
Troubleshooting	3–9*a*	3–23
Removal	2–11*e*	2–18
Replacement	2–14*c*	2–28
Frequency Mixer 1A4:		
Circuit analysis	1–16	1–9
Depot maintenance	3–10	3–27
Alignment	3–10*b*	3–29
Troubleshooting	3–10*a*	3–27
Removal	2–11*f*	1–6
Replacement	2–14*d*	1–7
Frequency Mixer 1A8:		
Alignment	2–21	2–35
Circuit analysis	1–20	1–13
Depot maintenance	3–14	3–37
Alignment	3–14*b*	3–39
Troubleshooting	3–14*a*	3–37
Removal	2–11*j*	2–20
Replacement	2–14*h*	2–28
General Instructions	2–1	2–1
General Parts Replacement Techniques	2–10, 3–3, 4–3, 5–3	2–14, 3–4, 4–1, 5–3
General Block Diagram	1–5	1–5
If. Amplifier 1A7:		
Circuit analysis	1–19	1–12
Depot maintenance	3–13	3–33
Alignment	3–13*b*	3–35
Troubleshooting	3–13*a*	3–34
Removal	2–11*i*	2–20
Replacement	2–14*g*	2–29
Impedance Matching Network	1–36	1–26
Inductor 1L6:		
Removal	2–11*z*	2–24
Replacement	2–14*x*	2–31
Installation Procedures:		
Antenna coupler	4–7	4–6
Remote control	5–8	5–4
Limiter 1A5:		
Circuit analysis	1–17	1–10
Depot maintenance	3–11	3–30
Removal	2–11*g*	2–18
Replacement	2–14*e*	2–28
Limiter 1A14:		
Circuit analysis	1–23	1–19
Depot maintenance	3–20	3–53
Removal	2–11*p*	2–21
Replacement	2–14*n*	2–30
Limiter 1A15:		
Alignment	2–24	2–37
Circuit analysis	1–24	1–20
Depot maintenance	3–21	3–54
Alignment	3–21*b*	3–54
Troubleshooting	3–21*a*	3–54
Removal	2–11*q*	2–30
Replacement	2–14*o*	2–30
Meter Circuits, Theory	1–31	1–26
Noise and Distortion Test	6–10	6–9
Organization of Troubleshooting Procedures	2–2	2–1
Pa. Switch 1S6:		
Removal	2–11*aa*	2–24
Replacement	2–14*y*	2–31
Performance Check, Rt Unit	2–5*b*	2–4
Performance Test:		
Antenna coupler	4–4	4–1
Remote control	5–4	5–2
Power Amplifier (Pa):		
Circuit analysis	1–30	1–25
Depot maintenance	3–5	3–5
Power Supply:		
Circuit analysis	1–29	1–24
Depot maintenance	3–4	3–5
Procedures, Rt Unit	2–5	2–2
Reassembly:		
Rf amplifier 1A1	3–7	3–8
Rf oscillator 1A10	3–16	3–41
Rf oscillator 1A11	3–17	3–45
Rf oscillator 1A12	3–18	3–48
Rf oscillator 1A13	3–19	3–50
Speed decreaser gear assembly 1MP70	3–26	3–61
Speed decreaser gear assembly 1MP71	3–27	3–64
Receive Mode:		
Operation	1–9	1–2
Functioning	1–6	1–2
Receiver Spurious Emission Test	6–8	6–7
Receive/Transmit Relay Switching	3–6	3–6
Relay Bracket Assembly 1A20:		
Removal	2–11*v*	2–22
Replacement	2–14*t*	2–30
Remote Control:		
Audio amplifier A1	5–6	5–3
General parts replacement techniques	5–3	5–2
Installation procedures	5–8	5–4
Noise and performance test	6–10	6–9
Performance test	5–4	5–2
Removal procedures	5–7	5–3
Af amplifier A1	2–13*b*	2–26
Cover	2–13*a*	2–25
Transformer assembly A2	2–13*c*	2–26
Replacement procedures:		
Af amplifier A1	2–16*a*	2–32
Cover	2–16*c*	2–32
Transformer assembly A2	2–16*b*	2–32

	Paragraph	Page
Test equipment and fabricated connectors	5-2	5-1
Transformer assembly A2	5-5	5-3
Removal Procedures:		
Antenna coupler	2-12, 4-6	2-25, 4-4
Remote control	2-13, 5-7	2-25, 5-3
Rt unit	2-11	2-14
Rf Amplifier 1A1:		
Alignment	2-19	2-32
Circuit analysis	1-13	1-6
Depot maintenance	3-7	3-8
Alignment	3-7*d*	3-17
Disassembly	3-7*b*	3-14
Reassembly	3-7*c*	3-15
Troubleshooting	3-7*a*	3-8
Removal	2-11*c*	2-14
Replacement	2-14*a*	2-26
Rf Oscillator 1A9:		
Circuit analysis	1-21	1-14
Depot maintenance	3-15	3-39
Alignment	3-15*b*	3-40
Troubleshooting	3-15*a*	3-39
Removal	2-11*k*	2-20
Replacement	2-14*i*	2-29
Rf Oscillator 1A10:		
Alignment	2-23	2-36
Circuit analysis	1-22	1-14
Depot maintenance	3-16	3-41
Alignment	3-16*d*	3-44
Assembly	3-16*c*	3-42
Disassembly	3-16*b*	3-42
Troubleshooting	3-16*a*	3-41
Removal	2-11*l*	2-20
Replacement	2-14*j*	2-29
Rf Oscillator 1A11:		
Circuit analysis	1-22*c*	1-18
Depot maintenance	3-17	3-45
Alignment	3-17*d*	3-47
Assembly	3-17*c*	3-47
Disassembly	3-17*b*	3-47
Troubleshooting	3-17*a*	3-45
Removal	2-11*m*	2-20
Replacement	2-14*k*	2-29
Rf Oscillator 1A12:		
Circuit analysis	1-22*d*	1-18
Depot maintenance	3-18	3-48
Assembly	3-18*c*	3-50
Disassembly	3-18*b*	3-50
Troubleshooting	3-18*a*	3-48
Removal	2-11*n*	2-21
Replacement	2-14*l*	2-29
Rf Oscillator 1A13:		
Circuit maintenance	1-22*e*	1-19
Depot maintenance	3-19	3-50
Assembly	3-19*c*	3-53
Disassembly	3-19*b*	3-50
Troubleshooting	3-19*a*	3-50
Removal	2-11*o*	2-21
Replacement	2-14*m*	2-30
Rf Oscillator 1A17:		
Alignment	2-25	2-37
Circuit analysis	1-26	1-21
Depot maintenance	3-23	3-56
Removal	2-11*s*	2-21
Rt Unit Description	1-8	1-2
Rt Unit Removal Procedures	2-11	2-14
Scope	1-1	1-1
Selectivity Test	6-5	6-4
Signal Substitution and Signal Tracing	2-5*d*	2-9
Short Circuit Test	2-5*a*	2-2
Stability Test	6-4	6-3
Speed Decreaser Gear Assembly 1MP70:		
Assembly	3-26*b*	3-64
Disassembly	3-26*a*	3-62
Removal	2-11*x*	2-24
Replacement	2-4*v*	2-31
Speed Decreaser Gear Assembly 1MP71:		
Assembly	3-27*b*	3-64
Disassembly	3-27*a*	3-64
Removal	2-11*y*	2-24
Replacement	2-14*w*	2-31
Synthesizer 1A2:		
Alignment	2-20	2-33
Circuit analysis	1-14	1-7
Depot maintenance	3-8	3-19
Alignment	3-8*b*	3-22
Troubleshooting	3-8*a*	3-9
Removal	2-11*d*	2-18
Replacement	2-14*b*	2-28
Test Equipment and Fabricated connectors	5-2	5-1
Test Equipment Required	2-3, 2-18	2-2, 2-32
Test Equipment and Special Items Required for Maintenance	3-2, 4-2	3-1, 4-1
Theory, Antenna Coupler:		
Description	1-33	1-25
Functional operation	1-34	1-25
General	1-32	1-25
Impedance matching network	1-36	1-26
Swr bridge 2A1	1-35	1-25
Theory, Radio Set:		
Receive mode	1-6	1-2
Transmit mode	1-5	1-2
Theory, Remote Control:		
Audio amplifier A1	1-40	1-26
Description	1-38	1-26
Functional operation	1-39	1-26
General	1-37	1-26
Theory, Rt Unit:		
Description	1-8	1-2
Frequency conversion	1-11	1-4
General	1-7	1-2
Receive mode	1-9	1-2
Transmit mode	1-10	1-4
Translator 1A6:		
Circuit analysis	1-18	1-10
Depot maintenance	3-12	3-30
Alignment	3-12*b*	3-33
Troubleshooting	3-12*a*	3-30
Removal	2-11*h*	2-18
Replacement	2-14*f*	2-28
Transmission Line Impedance Test	6-9	6-8
Transmit Mode of Operation	1-10	1-4

of af amplifier 1A16 is applied to front panel speaker 1LS1.

1–10. Transmit Mode of Operation (fig. 1–3)

a. Transmitter keying is accomplished by depressing the microphone or cw hand keyer at the rt unit or by depressing the handset or cw hand keyer at the remote control.

b. In frequency mixer 1A8, audio from the microphone, handset, or cw oscillator (located in frequency mixer 1A8), is amplified and applied to a diode ring modulator/detector to modulate the 455 kHz injection signal.

c. The modulated 455 kHz signal, consisting of both an upper and lower sideband (the 455 kHz injection signal is balanced out), is amplified by if. amplifier 1A7 and applied to filter assembly 1A19. The unwanted sideband is attenuated by the narrow passband of the filter selected by the FUNCTION switch. Because of sideband inversion in translator 1A6, the lower sideband of the 455 kHz if. signal is selected for the usb, cw, and am. transmit modes, and the upper sideband of the 455 kHz if. signal is selected for the lsb transmit mode.

d. The modulated and filtered single sideband 455 kHz if. signal is first converted to 11.100 MHz, then to 17.748 MHz, and finally to the selected operating frequency in translator 1A6. This is accomplished by mixing the modulated 455 kHz if. signal with the same injection frequencies used in the receive mode (para 1–10*a*). During am. transmit operation, the 455 kHz carrier signal that was balanced out in frequency mixer 1A8 is re-inserted with the single sideband input signal at translator 1A6.

e. The output signal of translator 1A6, at the desired operating frequency, is applied to rf amplifier 1A1. Rf amplifier 1A1 is utilized as the driver stage for the power amplifier (pa.) in the transmit mode. Rf amplifier 1A1 and the pa. are both tuned by combinations of fixed capacitors (selected by the 1000 kHz FREQUENCY KILOCYCLES control) and variable inductors (adjusted by the PRESELECTOR and PA TUNE controls). The 100 watt pa. output is connected to the antenna or antenna coupler by transmit-receive relay 1K4.

f. Amplifier-limiter, 1A14 (limiter 1A14) limits excessively large voice peaks at the pa. grids of tubes 1V1, 1V2, and 1V3. Amplifier- limiter, 1A15 (limiter 1A15) provides the correct level of re-inserted carrier (for 25 watts carrier output) during am. transmit operation.

1–11. Frequency Conversion (fig. 1–4)

a. Frequency conversion is provided by synthesizer, electrical frequency, 1A2 (synthesizer 1A2); oscillators, rf, 1A9 through 1A13, and 1A17 (rf oscillators 1A9, 1A10, 1A11, 1A12, 1A13, and 1A17); mixer, stage, frequency, 1A4 (frequency mixer 1A4); and frequency mixer 1A3. These subassemblies provide the required injection frequencies to translator 1A6 (fig. 1–2, 1–3) and frequency mixer 1A8. This enables the conversion (heterodyning) of the received rf signals to the audio signal during the receive mode and the conversion of the transmit mode. The discrete rf oscillator injection frequencies are determined by the position of the FREQUENCY KILOCYCLES controls. The operating frequency may be any one of 13,000 available channels, spaced at 1 kHz increments, between 2 and 15 MHz. Continuous tuning between channels is provided by rf oscillator 1A9 and is energized by pulling out on the 1 kHz FREQUENCY KILOCYCLES control knob.

Note. In the following discussion only the ssb receive mode is explained.

b. To maintain the required frequency accuracy for ssb operation, it is necessary to cancel out the inherent errors, either high or low in frequency, in each crystal used in rf oscillators 1A10 through 1A13. In the following paragraphs (*c* through *g*) the frequency conversion process and the error cancellation methods employed are explained.

c. The desired received rf signal and the output of rf oscillator 1A10 (with an error) are applied to translator 1A6 (fig. 1–2) where they are added together to produce the first if. signal, 17.748 MHz±0.5 MHz. Since the two input frequencies at translator 1A6 are added, the frequency error (either high or low) in the output of rf oscillator 1A10 (fig. 1–4) will be reflected in the first if. signal. This error will be in the same direction as the error in the output of rf oscillator 1A10. The output frequency of rf oscillator 1A10 is determined by the position of the 1000 kHz FREQUENCY KILOCYCLES control. The output of rf oscillator 1A11 (with an error) is also applied to translator 1A6, where it is subtracted from the first if. signal to produce the second if. signal, 11.100 MHz ± 0.5 MHz. Since the output of rf oscillator 1A11 is subtracted from the first if. sig-

of af amplifier 1A16 is applied to front panel speaker 1LS1.

1–10. Transmit Mode of Operation (fig. 1–3)

a. Transmitter keying is accomplished by depressing the microphone or cw hand keyer at the rt unit or by depressing the handset or cw hand keyer at the remote control.

b. In frequency mixer 1A8, audio from the microphone, handset, or cw oscillator (located in frequency mixer 1A8), is amplified and applied to a diode ring modulator/detector to modulate the 455 kHz injection signal.

c. The modulated 455 kHz signal, consisting of both an upper and lower sideband (the 455 kHz injection signal is balanced out), is amplified by if. amplifier 1A7 and applied to filter assembly 1A19. The unwanted sideband is attenuated by the narrow passband of the filter selected by the FUNCTION switch. Because of sideband inversion in translator 1A6, the lower sideband of the 455 kHz if. signal is selected for the usb, cw, and am. transmit modes, and the upper sideband of the 455 kHz if. signal is selected for the lsb transmit mode.

d. The modulated and filtered single sideband 455 kHz if. signal is first converted to 11.100 MHz, then to 17.748 MHz, and finally to the selected operating frequency in translator 1A6. This is accomplished by mixing the modulated 455 kHz if. signal with the same injection frequencies used in the receive mode (para 1–10*a*). During am. transmit operation, the 455 kHz carrier signal that was balanced out in frequency mixer 1A8 is re-inserted with the single sideband input signal at translator 1A6.

e. The output signal of translator 1A6, at the desired operating frequency, is applied to rf amplifier 1A1. Rf amplifier 1A1 is utilized as the driver stage for the power amplifier (pa.) in the transmit mode. Rf amplifier 1A1 and the pa. are both tuned by combinations of fixed capacitors (selected by the 1000 kHz FREQUENCY KILOCYCLES control) and variable inductors (adjusted by the PRESELECTOR and PA TUNE controls). The 100 watt pa. output is connected to the antenna or antenna coupler by transmit-receive relay 1K4.

f. Amplifier-limiter, 1A14 (limiter 1A14) limits excessively large voice peaks at the pa. grids of tubes 1V1, 1V2, and 1V3. Amplifier- limiter, 1A15 (limiter 1A15) provides the correct level of re-inserted carrier (for 25 watts carrier output) during am. transmit operation.

1–11. Frequency Conversion (fig. 1–4)

a. Frequency conversion is provided by synthesizer, electrical frequency, 1A2 (synthesizer 1A2); oscillators, rf, 1A9 through 1A13, and 1A17 (rf oscillators 1A9, 1A10, 1A11, 1A12, 1A13, and 1A17); mixer, stage, frequency, 1A4 (frequency mixer 1A4); and frequency mixer 1A3. These subassemblies provide the required injection frequencies to translator 1A6 (fig. 1–2, 1–3) and frequency mixer 1A8. This enables the conversion (heterodyning) of the received rf signals to the audio signal during the receive mode and the conversion of the transmit mode. The discrete rf oscillator injection frequencies are determined by the position of the FREQUENCY KILOCYCLES controls. The operating frequency may be any one of 13,000 available channels, spaced at 1 kHz increments, between 2 and 15 MHz. Continuous tuning between channels is provided by rf oscillator 1A9 and is energized by pulling out on the 1 kHz FREQUENCY KILOCYCLES control knob.

Note. In the following discussion only the ssb receive mode is explained.

b. To maintain the required frequency accuracy for ssb operation, it is necessary to cancel out the inherent errors, either high or low in frequency, in each crystal used in rf oscillators 1A10 through 1A13. In the following paragraphs (*c* through *g*) the frequency conversion process and the error cancellation methods employed are explained.

c. The desired received rf signal and the output of rf oscillator 1A10 (with an error) are applied to translator 1A6 (fig. 1–2) where they are added together to produce the first if. signal, 17.748 MHz±0.5 MHz. Since the two input frequencies at translator 1A6 are added, the frequency error (either high or low) in the output of rf oscillator 1A10 (fig. 1–4) will be reflected in the first if. signal. This error will be in the same direction as the error in the output of rf oscillator 1A10. The output frequency of rf oscillator 1A10 is determined by the position of the 1000 kHz FREQUENCY KILOCYCLES control. The output of rf oscillator 1A11 (with an error) is also applied to translator 1A6, where it is subtracted from the first if. signal to produce the second if. signal, 11.100 MHz ± 0.5 MHz. Since the output of rf oscillator 1A11 is subtracted from the first if. sig-

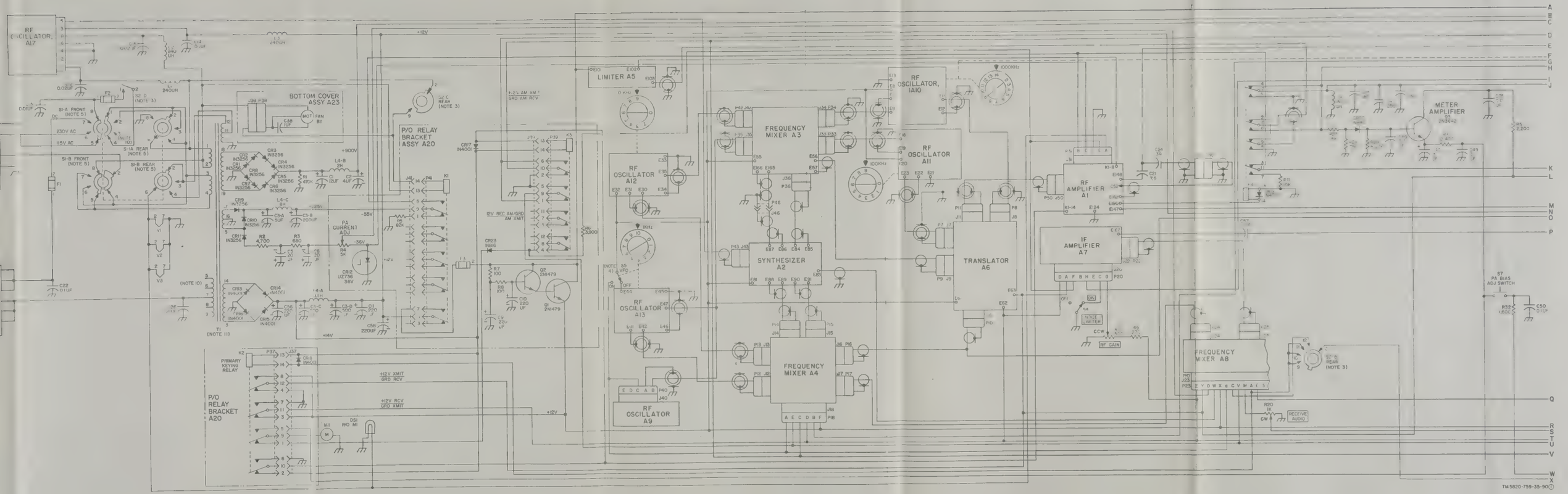
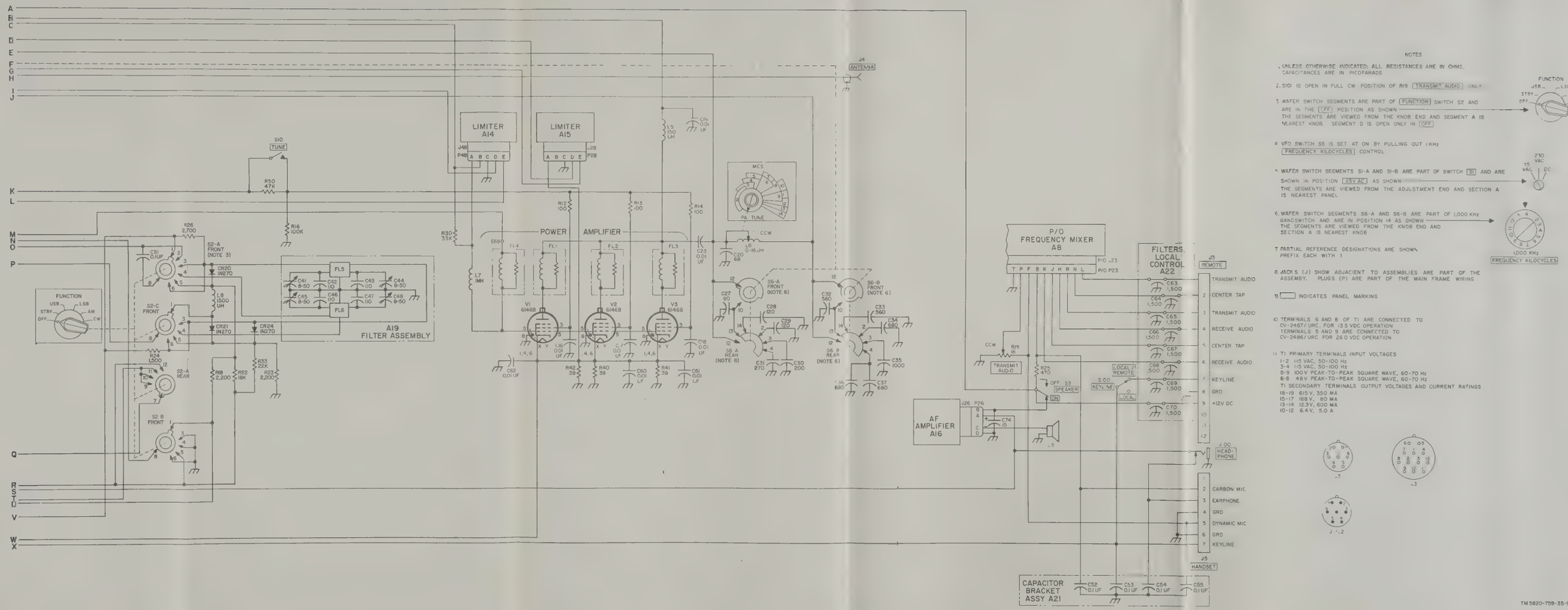


Figure 6-12①. Receiver-Transmitter, Radio RT-902/GRC-165, main frame schematic diagram.



NOTES

1. UNLESS OTHERWISE INDICATED: ALL RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN PICOFARADS
2. S10 IS OPEN IN FULL CW POSITION OF R19 [TRANSMIT AUDIO] ONLY
3. WAFER SWITCH SEGMENTS ARE PART OF [FUNCTION] SWITCH S2 AND ARE IN THE [OFF] POSITION AS SHOWN. THE SEGMENTS ARE VIEWED FROM THE KNOB END AND SEGMENT A IS NEAREST KNOB. SEGMENT D IS OPEN ONLY IN [OFF]
4. VFO SWITCH S5 IS SET AT ON BY PULLING OUT 1 KHz [FREQUENCY KILOCYCLES] CONTROL
5. WAFER SWITCH SEGMENTS S1-A AND S1-B ARE PART OF SWITCH [S1] AND ARE SHOWN IN POSITION [115 VAC] AS SHOWN. THE SEGMENTS ARE VIEWED FROM THE ADJUSTMENT END AND SECTION A IS NEAREST PANEL
6. WAFER SWITCH SEGMENTS S6-A AND S6-B ARE PART OF 1,000 KHz BANDSWITCH AND ARE IN POSITION 14 AS SHOWN. THE SEGMENTS ARE VIEWED FROM THE KNOB END AND SECTION A IS NEAREST KNOB
7. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. PREFIX EACH WITH 1
8. JACKS (J) SHOW ADJACENT TO ASSEMBLIES ARE PART OF THE ASSEMBLY. PLUGS (P) ARE PART OF THE MAIN FRAME WIRING
9. [ ] INDICATES PANEL MARKING
10. TERMINALS 6 AND 8 OF T1 ARE CONNECTED TO CV-2487/URC FOR 13.5 VDC OPERATION
    TERMINALS 5 AND 9 ARE CONNECTED TO CV-2486/URC FOR 26.0 VDC OPERATION
11. T1 PRIMARY TERMINALS INPUT VOLTAGES
    1-2 115 VAC, 50-100 Hz
    3-4 115 VAC, 50-100 Hz
    5-9 100 V PEAK-TO-PEAK SQUARE WAVE, 60-70 Hz
    6-8 48 V PEAK-TO-PEAK SQUARE WAVE, 60-70 Hz
    T1 SECONDARY TERMINALS OUTPUT VOLTAGES AND CURRENT RATINGS
    18-19 615 V, 350 MA
    15-17 188 V, 80 MA
    13-14 12.3 V, 600 MA
    10-12 6.4 V, 5.0 A

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Figure 6-12②. Receiver-Transmitter, Radio RT-902/GRC-165, main frame schematic diagram.

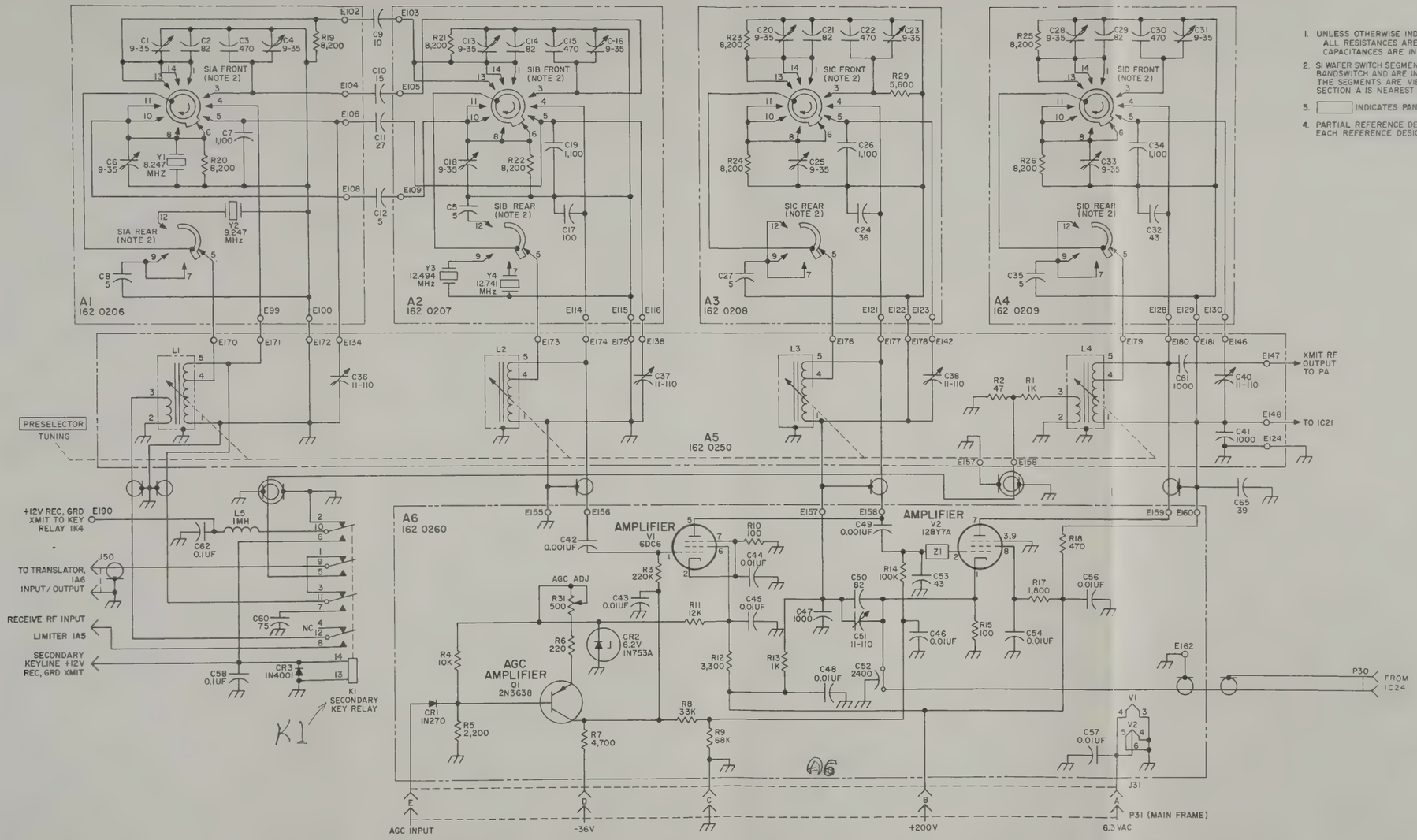


Figure 6-13. Rf Amplifier 1A1, schematic diagram.

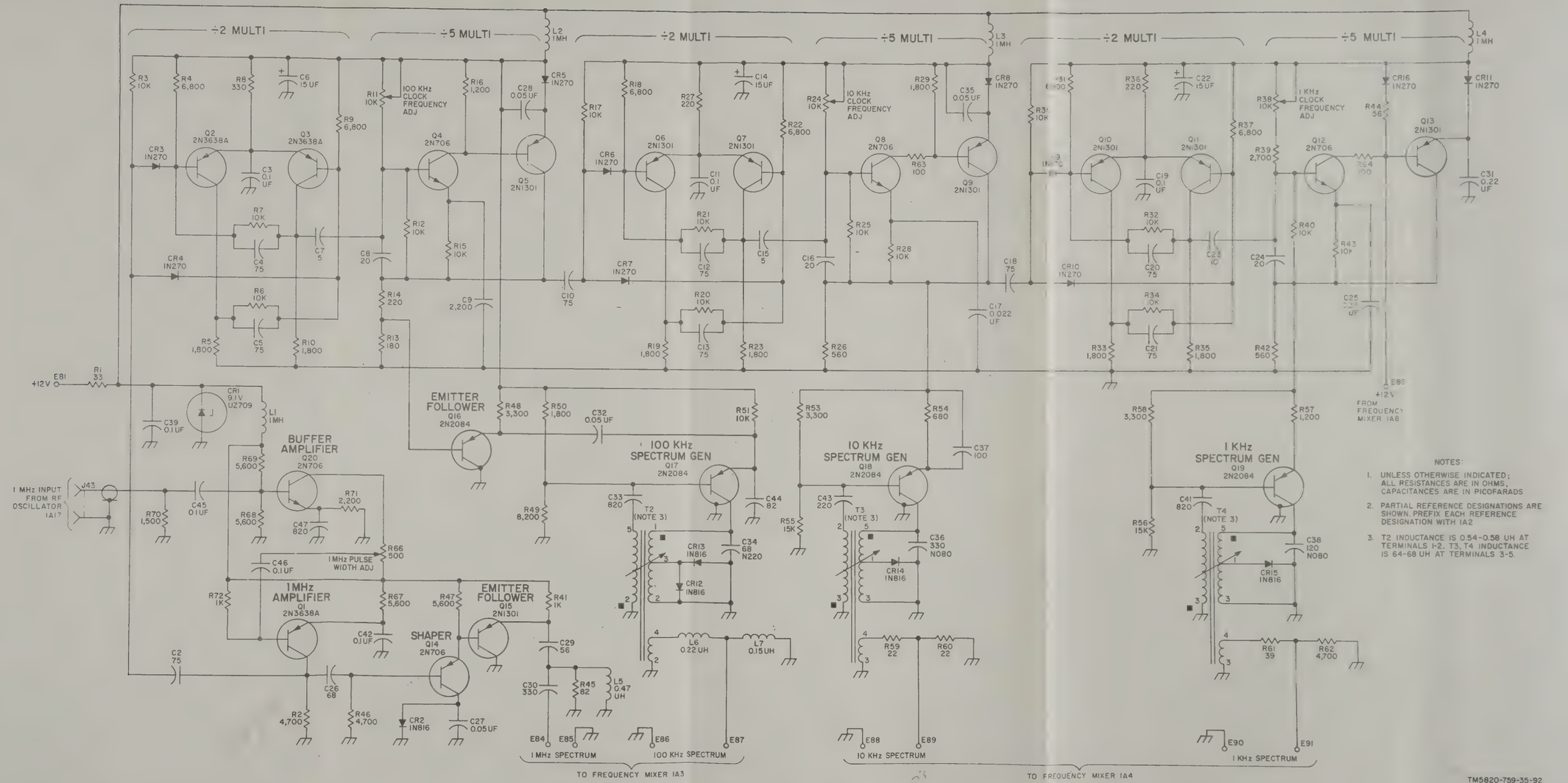


Figure 6–14. Synthesizer, Electrical, Frequency, 1A(3), schematic diagram.

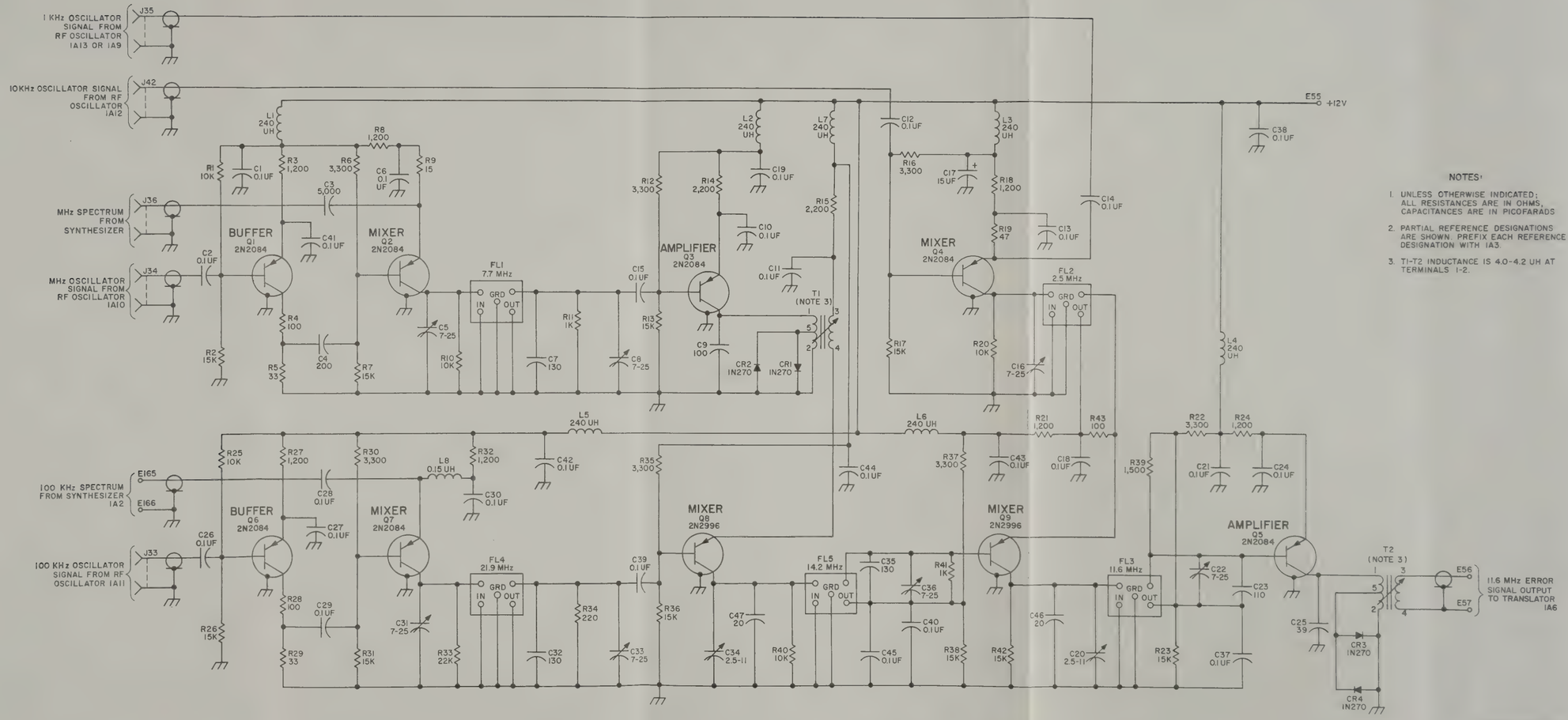


Figure 6-15. Mixer, Stage, Frequency, 1A3, schematic diagram.

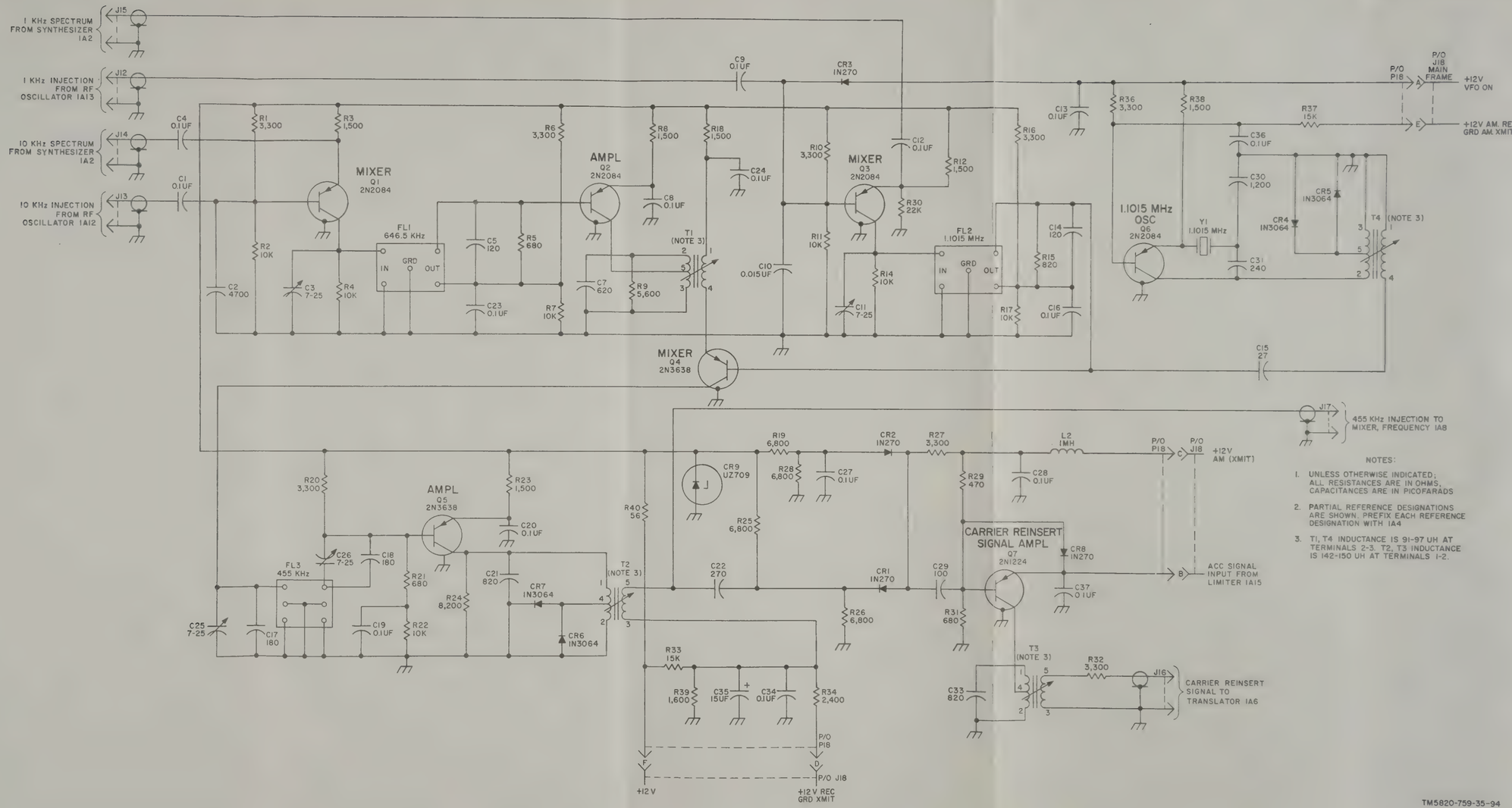
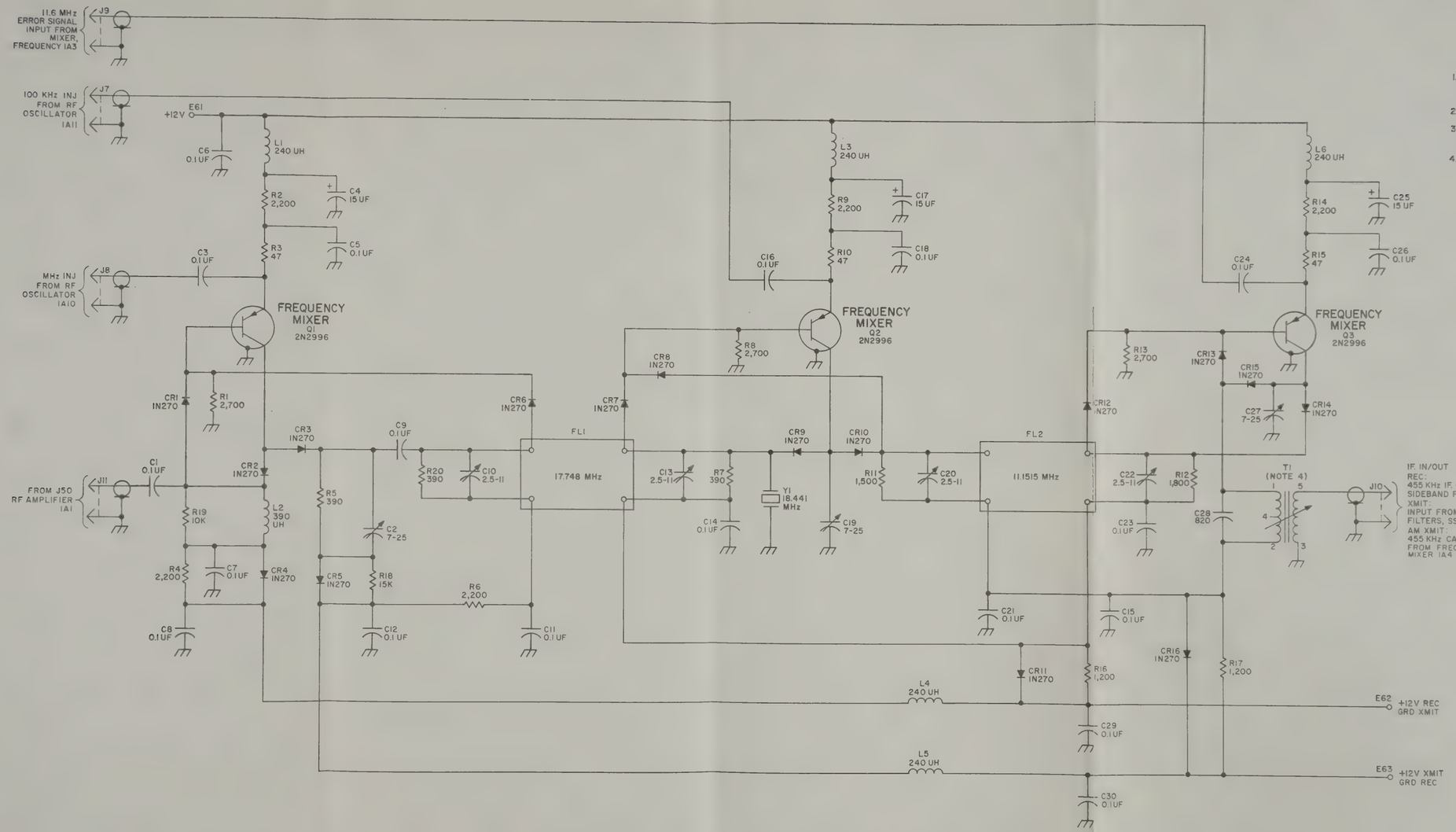


Figure 6-16. Mixer Stage, Frequency, 1A4, schematic diagram.



NOTES:

1. UNLESS OTHERWISE INDICATED, ALL RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN PICOFARADS
2. ▭ DENOTES PANEL MARKING
3. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. PREFIX EACH REFERENCE DESIGNATION WITH 1A6
4. T1 INDUCTANCE IS 142-150 UH AT TERMINALS 1-2

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Figure 6-17. Translator, Signal Data, 1A6, Schematic diagram.

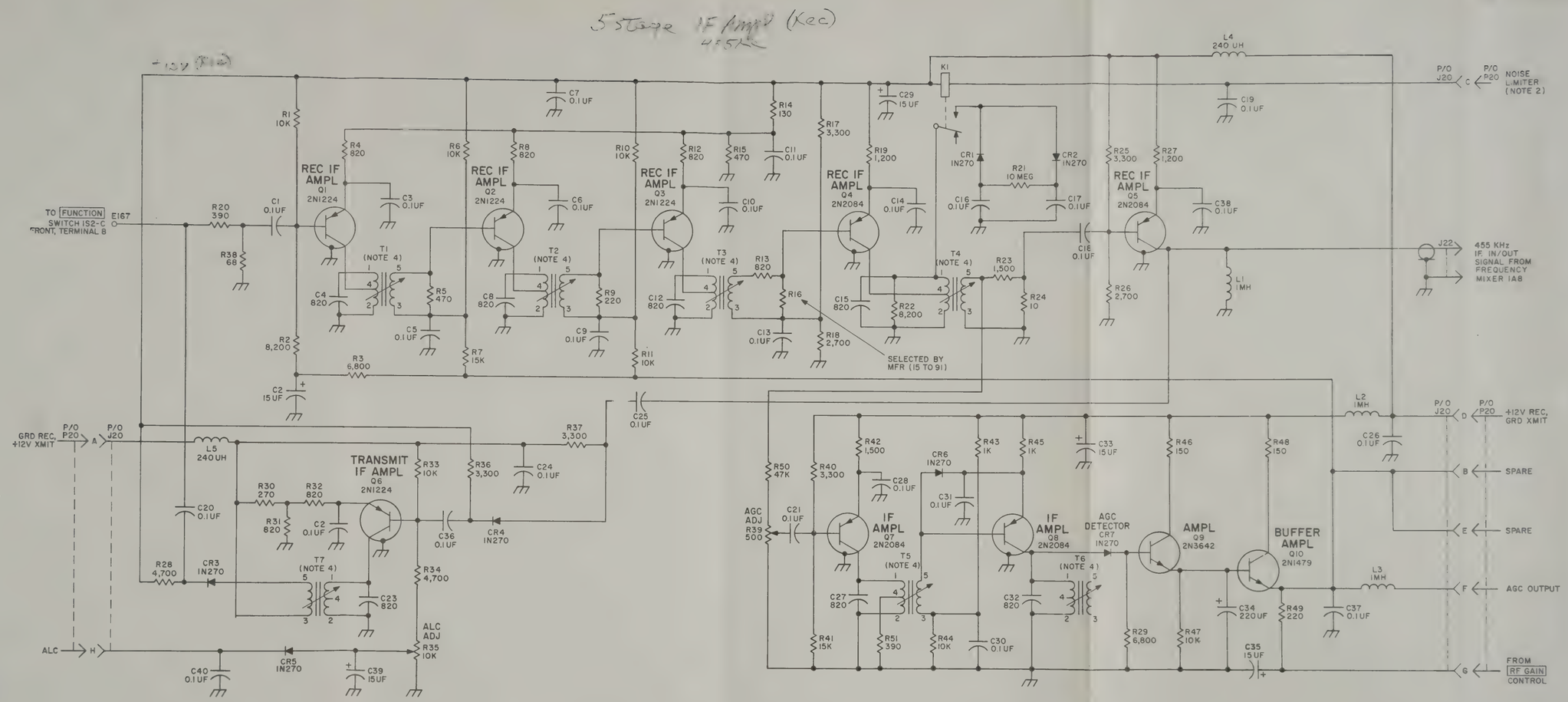

Figure 6-18. IF. amplifier 1A7, schematic diagram.

NOTES:

1. UNLESS OTHERWISE INDICATED, RESISTANCES ARE IN OHMS, CAPACITANCE ARE IN PICOFARADS.
2. PIN C OF J20 GROUNDED WHEN NOISE LIMITER SWITCH 1S4 SET AT ON
3. PARTIAL REFERENCE DESIGNATION ARE SHOWN. PREFIX EACH REFERENCE DESIGNATION WITH 1A7.
4. T1-T7 INDUCTANCE IS 142-150 UH AT TERMINALS 1-2.

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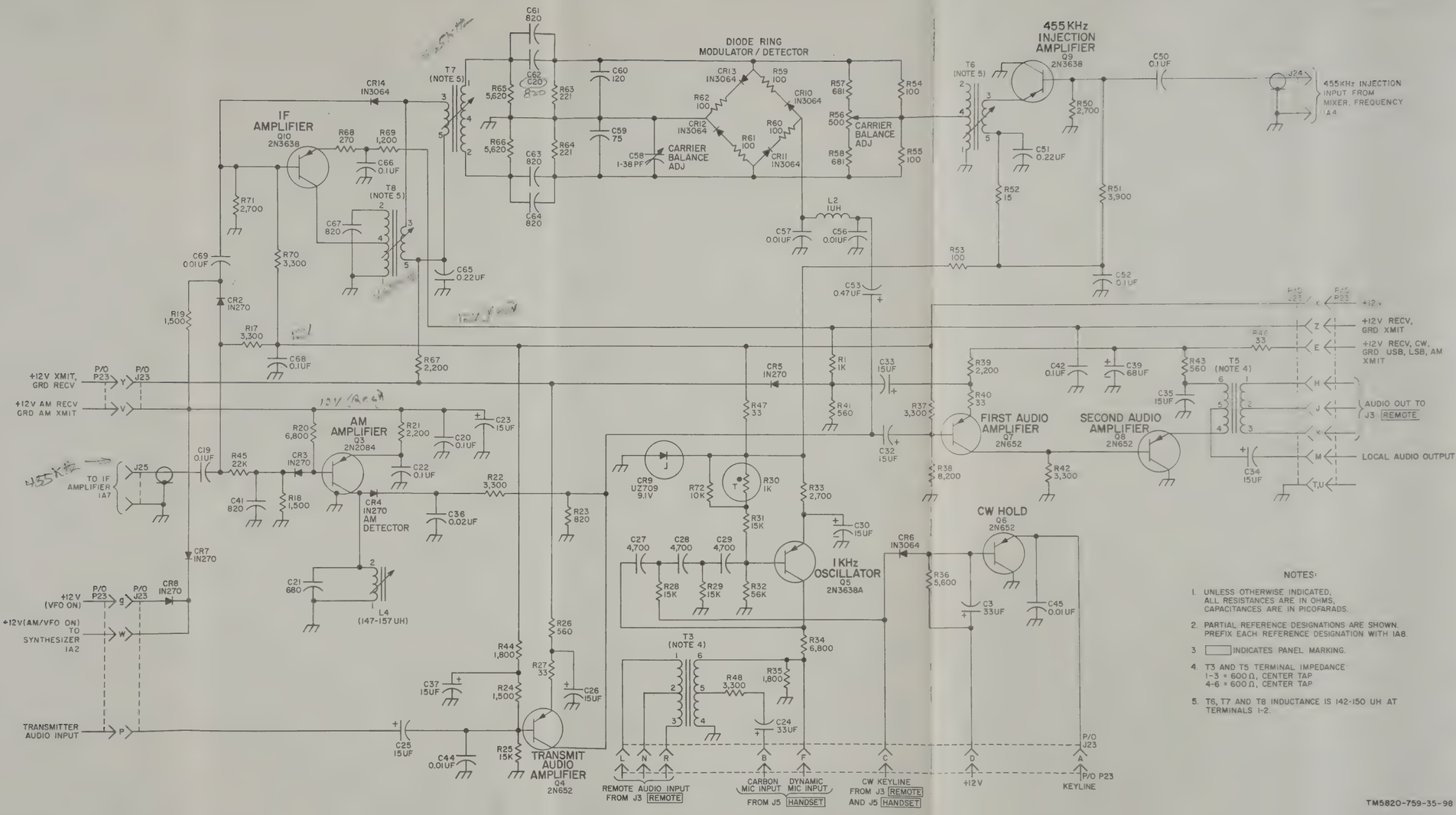
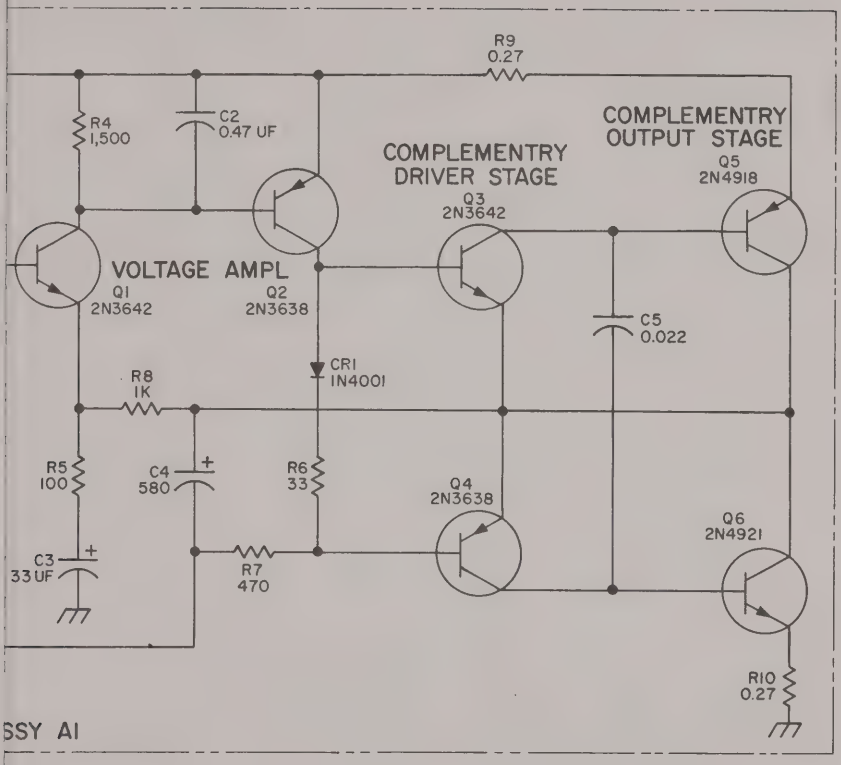


NOTES:

1. UNLESS OTHERWISE INDICATED, ALL RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN PICOFARADS.
2. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. PREFIX EACH REFERENCE DESIGNATION WITH 1A8.
3. ▭ INDICATES PANEL MARKING.
4. T3 AND T5 TERMINAL IMPEDANCE: 1-3 = 600 Ω, CENTER TAP; 4-6 = 600 Ω, CENTER TAP.
5. T6, T7 AND T8 INDUCTANCE IS 142-150 UH AT TERMINALS 1-2.

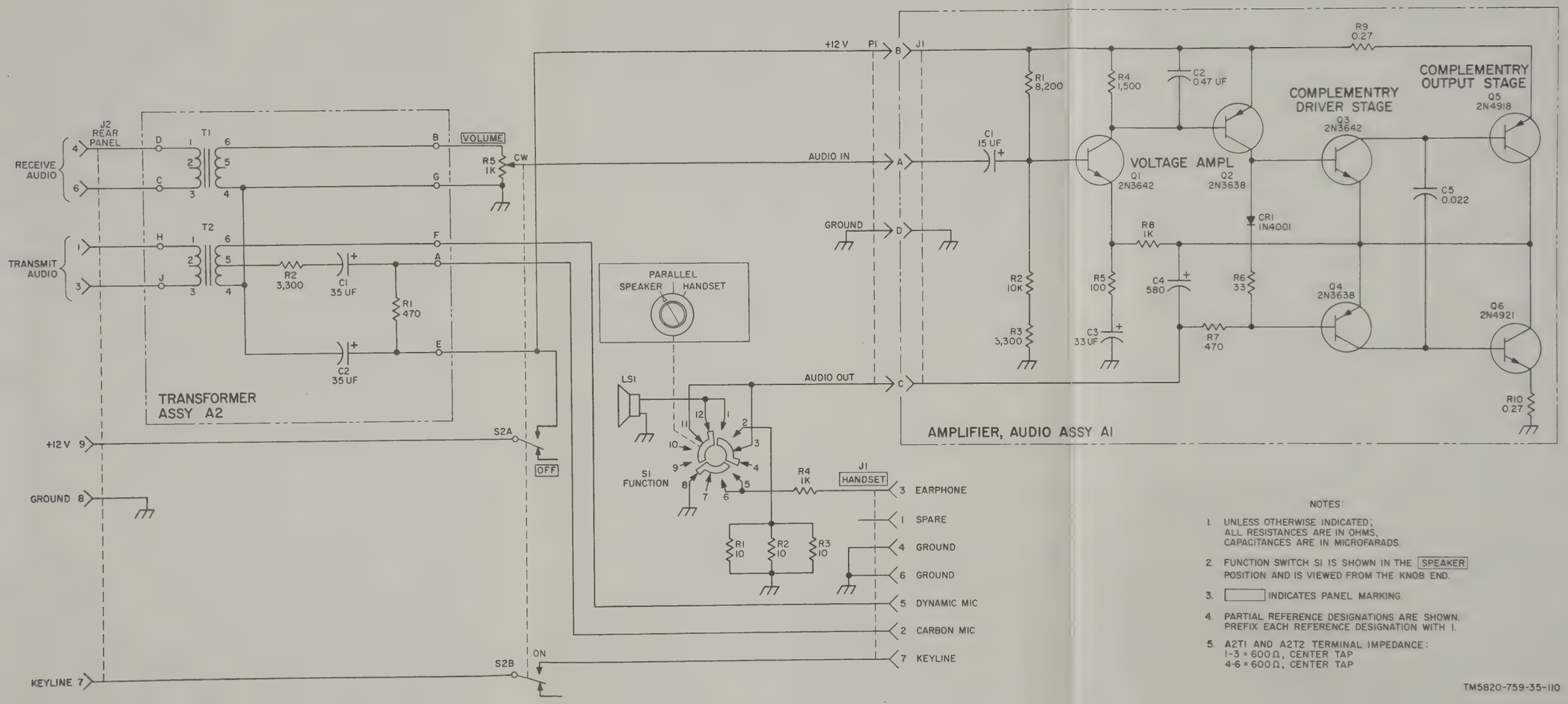
Figure 6-19. Mixer, Stage, Frequency, 1A8, schematic diagram.



NOTES:

1. UNLESS OTHERWISE INDICATED; ALL RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN MICROFARADS.
2. FUNCTION SWITCH S1 IS SHOWN IN THE [SPEAKER] POSITION AND IS VIEWED FROM THE KNOB END.
3. [ ] INDICATES PANEL MARKING.
4. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. PREFIX EACH REFERENCE DESIGNATION WITH 1.
5. A2T1 AND A2T2 TERMINAL IMPEDANCE:
   1-3 = 600Ω, CENTER TAP
   4-6 = 600Ω, CENTER TAP

TM5820-759-35-110

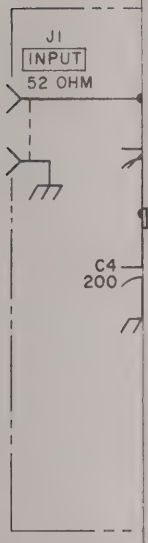


NOTES:

1. UNLESS OTHERWISE INDICATED; ALL RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN MICROFARADS.
2. FUNCTION SWITCH S1 IS SHOWN IN THE [SPEAKER] POSITION AND IS VIEWED FROM THE KNOB END.
3. [ ] INDICATES PANEL MARKING.
4. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. PREFIX EACH REFERENCE DESIGNATION WITH 1.
5. A2T1 AND A2T2 TERMINAL IMPEDANCE:
   1-3 = 600 Ω, CENTER TAP
   4-6 = 600 Ω, CENTER TAP

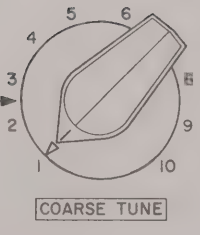
TM5820-759-35-110

Figure 6-21. Control, Radio Set C-7648/GRC-165, schematic diagram.

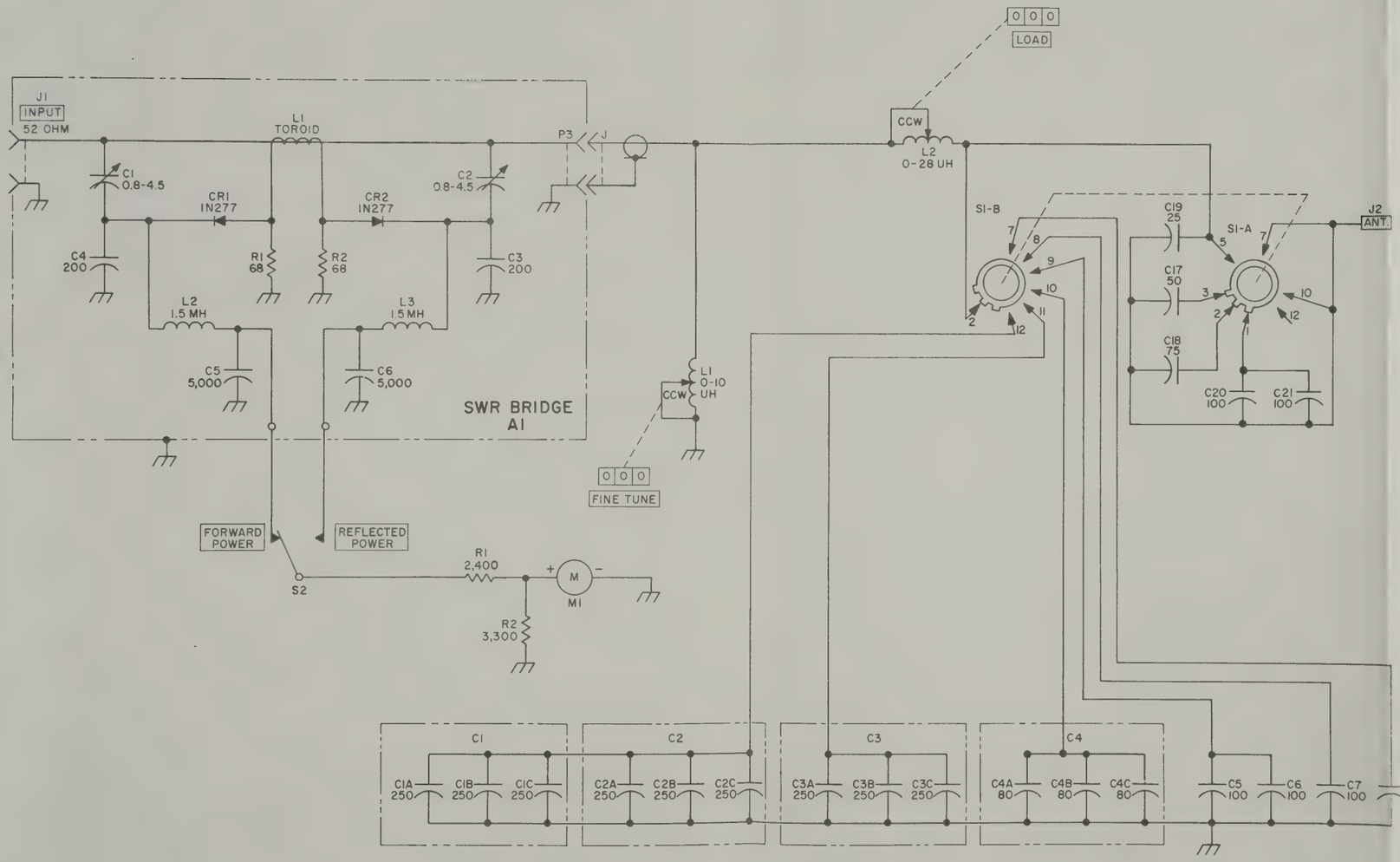


NOTES:

1. UNLESS OTHERWISE INDICATED; ALL RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN PICOFARADS
2. WAFER SWITCH SEGMENTS ARE PART OF [COARSE TUNE] SWITCH S1 AND ARE IN POSITION 1 AS SHOWN → THE SEGMENTS ARE VIEWED FROM KNOB END AND SECTION A IS NEAREST KNOB
3. [ ] INDICATES PANEL MARKING
4. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. PREFIX EACH REFERENCE DESIGNATION WITH 2

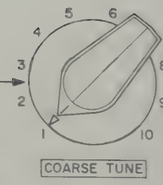


TM5820-759-35-109



NOTES:

1. UNLESS OTHERWISE INDICATED; ALL RESISTANCES ARE IN OHMS, CAPACITANCES ARE IN PICOFARADS
2. WAFER SWITCH SEGMENTS ARE PART OF [COARSE TUNE] SWITCH S1 AND ARE IN POSITION 1 AS SHOWN → THE SEGMENTS ARE VIEWED FROM KNOB END AND SECTION A IS NEAREST KNOB
3. [ ] INDICATES PANEL MARKING
4. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. PREFIX EACH REFERENCE DESIGNATION WITH 2



TM5820-759-35-109

Figure 6–20. Coupler, Antenna CU–1782/GRC–165, schematic diagram.

A-1

By Order of the Secretary of Army:

W. C. WESTMORELAND,
General, United States Army,
Chief of Staff.

Official:

KENNETH G. WICKHAM,
Major General, United States Army,
The Adjutant General.

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CNGB (1)
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CONARC (2)
USAMC (1)
USAMICOM (2)
USAECOM (2)
ARADCOM (2)
OS Maj Comd (2)
USACDCEC (10)
USASTRATCOM (10)
USAESC (70)
USATECOM (2)
USASTRATCOM–EUR (100)
USAREUR (25)
Armies (1) except
7th USA (25)
Sig FLDMS (Europe) (2)
USASA (2)
USACDCCEA (1)
USACDCCEA Ft Huachuca (1)
Army Dep (1) except
LBAD (10)
SAAD (15)
TOAD (14)
LEAD (7)
ATAD (10)
Svc Colleges (1)
Gen Dep (Europe) (2)
Sig Sec Gen Dep (Europe) (6)
Sig Dep (Europe) (6)
USACRREL (2)
WSMR (2)
Fort Carson (5)
USAERDAA (2)
USAERDAW (2)
USAFABD (2)
Units org under fol TOE:
(2 copies each)
11–158
11–302
11–303
11–367
11–368
11–500 (AA–AC)
29–134
29–136

NG: None.

USAR: None.

For explanation of abbreviations used, see AR 310–50.

☆U. S. GOVERNMENT PRINTING OFFICE: 1971—431–140/398

APPENDIX A

REFERENCES

DA Pam 310–4	Index of Technical Manuals, Technical Bulletins, Supply Manuals (Types 7, 8, and 9), Supply Bulletins, and Lubrication Orders.
DA Pam 310–7	U.S. Army Equipment Index of Modification Work Orders.
MWO 11–5820–759–30/1	Modification of Antenna Coupler CU–1782/GRC–165 to prevent equipment damage.
SC 5180–91–CL–R07	Tool Kit, Electronic Equipment TK–105/G.
SC 5180–91–CL–R13	Tool Kit, Electronic Equipment TK–101/G.
SC 5180–91–CL–S21	Tool Kit, Electronic Equipment TK–100/G.
TB SIG 355–1	Depot Inspection Standard for Repaired Signal Equipment.
TB SIG 355–2	Depot Inspection Standard for Refinishing Repaired Signal Equipment.
TB SIG 355–3	Depot Inspection Standard for Moisture and Fungus Resistant Treatment.
TM 11–4000	Troubleshooting and Repair of Radio Equipment.
TM 11–5820–759–12	Operator and Organizational Maintenance Manual Including Repair Parts and Special Tool List for Radio Set AN/GRC–165 and Control, Radio Set C–7648/GRC–165.
TM 11–6130–236–12	Organizational Maintenance Manual Charger, Battery PP–1451/G.
TM 11–6130–247–15	Organizational, DS, GS, and Depot Maintenance Manual, Including Repair Parts and Special Tool Lists, Power Supply PP–3940/G.
TM 11–6625–200–15	Operator, Organizational, DS, GS, and Depot Maintenance Manual Multimeters ME–26A/U, ME–26B/U, ME–26C/U, and ME–26D/U.
TM 11–6625–203–12	Operator and Organizational Maintenance Multimeter AN/URM–105 Including Multimeter ME–77/U.
TM 11–6625–274–12	Operator's and Organizational Maintenance Manual Test Set, Electron Tube TV–7/U, TV–7A/U, TV–7B/U, and TV–7D/U.
TM 11–6625–320–12	Organizational Maintenance Manual, Voltmeter, Meter ME–30A/U and Voltmeters, Electronic ME–30B/U, ME–30C/U, and ME–30E/U.
TM 11–6625–446–15	Operator, Organizational, Field and Depot Maintenance Manual Wattmeter AN/URM–120.
TM 11–6625–524–14	Operator, Organizational and Field Maintenance Manual Electronic Voltmeter AN/URM–145.
TM 11–6625–573–15	Operator, Organizational, Field, and Depot Maintenance Manual Signal Generator AN/GRM–50.
TM 11–6625–683–15	Operator, Organizational. DS, GS, and Depot Maintenance Manual Signal Generator AN/URM–127.
TM 11–6625–700–10	Operator's Manual Digital Readout, Electronic Counter AN/USM–207.
TM 11–6625–1703–15	Operator's Organizational, DS, GS, and Depot Maintenance Manual: Oscilloscope AN/USM–281.
TM 11–6625–1748–12	Operators and Organizational Maintenance Manual Transmission Test Set AN/USM–306.
TM 38–750	The Army Maintenance Management System (TAMMS).

APPENDIX B

DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

Section I. INTRODUCTION

B-1. Scope

This appendix contains a list of repair parts and special tools required for the performance of direct support, general support, and depot maintenance for Radio Set AN/GRC-165.

B-2. General

This repair parts and special tools list is divided into the following sections.

a. Repair Parts for Direct Support, General Support, and Depot Maintenance—Section II. This chart lists repair parts authorized for maintenance performance at direct support, general support, and depot levels.

b. Special Tools, Test and Support Equipment for Direct Support, General Support, and Depot Maintenance—Section III. Not applicable.

c. Index—Federal Stock Number Cross Reference to Figure and Item Number or Reference Designation—Section IV. A list of Federal stock numbers in ascending numerical sequence, followed by a list of reference numbers appearing in ascending alpha-numeric sequence, cross-referenced to the illustration and item number or reference designation.

d. Index—Reference Designation Cross Reference to Page Number—Section V. A list of reference designations cross-referenced to page numbers.

B-3. Explanation of Columns

An explanation of the columns is given below:

a. Source, Maintenance, and Recoverability Codes, Column 1.

(1) *Source code, column 1a.* The selection status and source for the listed item is shown in this column. Source codes and their explanations are as follows:

Code	*Explanation*
P	—applies to repair parts which are stocked in or supplied from the GSA/DSA, or Army supply system, and authorized for use at indicated maintenance categories.
M	—applies to repair parts which are not procured or stocked but are to be manufactured at indicated maintenance categories.
A	—applies to assemblies which are not procured or stocked as such but are made up of two or more units, each of which carry individual stock numbers and descriptions and are procured and stocked and can be assembled by units at indicated maintenance categories.
X1	—applies to repair parts which are not procured or stocked, the requirement for which will be supplied by use of next higher assembly or component.
X2	—applies to repair parts which are not stocked. The indicated maintenance category requiring such repair parts will attempt to obtain such parts through cannibalization. If they are not obtainable through cannibalization, such repair parts will be requisitioned with supporting justification through normal supply channels.

(2) *Maintenance code, column 1b.* The lowest category of maintenance authorized to install the listed item is indicated in this column.

Code	*Explanation*
O	—Organizational Maintenance
F	—Direct Support Maintenance
D	—Depot Support Maintenance

(3) *Recoverability code, column 1c.* The information in this column indicates whether unserviceable items should be returned for recovery or salvage. Recoverability codes are—

Code	*Explanation*
R	—applies to repair parts and assemblies which are economically repairable at DSU and GSU activities and normally are furnished by supply on an exchange basis.

NOTE

When there is no code indicated in the recoverability column, the part will be considered expendable.

b. Federal Stock Number, Column 2. The Federal stock number for the item is indicated in this column.

c. Description, Column 3. The model designator, sequence number, Federal item name, a five-digit manufacturer's code, an indenture code, and a part number are included in this column. For subsequent appearances of the same item, the manufacturer's code and part number are omitted. The words "same as" followed by the sequence number assigned to the item when it first appeared in the list will follow the item name, e.g. "RESISTOR, FIXED, COMPOSITION: SAME AS A298". The indenture codes indicate the end item, the assemblies, and the component parts. Identical codes are parts of the preceding higher code. An asterisk (*) indicates attaching hardware.

d. Unit of Issue, Column 4. The unit used as a basis of issue (e.g. ea, pr, ft, yd, etc) is noted in this column.

e. Quantity Incorporated in Unit Pack, Column 5. Not applicable.

f. Quantity Incorporated in Unit, Column 6. The quantity of repair parts in an assembly is indicated in this column. Subsequent appearances of the same item in the same assembly are indicated by the letters "REF".

g. Maintenance Allowances (Section II, Col 7, Section II and III).

(1) The allowance column are divided into subcolumns. The total quantity of items authorized for the number of equipments supported is indicated in each subcolumn opposite the first appearance of each item. Subsequent appearances of the same item will have no entry in the allowance columns but will have a reference, in the description column, to the first appearance of the item. Items authorized for use as required, but not for initial stockage, are identified with an asterisk (*) in the allowance column.

(2) The quantitative allowances for DS/GS levels of maintenance will represent initial stockage for a 30-day period for the number of equipments supported.

h. One-Year Allowances Per 100 Equipments/ Contingency Planning Purposes, Column 8. Opposite the first appearance of each item, the total quantity required for distribution and contingency planning purposes is indicated. The range of items indicates total quantities of all authorized items required to provide for adequate support of 100 equipments for 1 year.

i. Depot Maintenance Allowance Per 100 Equipments, Column 9, Sections II and III. This column indicates the total quantity of each item authorized depot maintenance for 100 equipments. Subsequent appearances of the same item will have no entry in this column, but will have a reference in the description column to the first appearance of the item.

j. Illustration, Column 10.

(1) *Figure number, column 10a.* The figure number of the illustration in which the item is shown, and the maintenance-level suffix number of the technical manual in which the illustration appears is included in this column. For example, if the illustration in which the item is shown is figure 1–13 of the operator's (–10) manual, the manual suffix *–10* appears on the first line and the illustration number *1–13* on the second line.

(2) *Item or symbol number, column 10b.* The item number or reference designation used to reference the item in the illustration is indicated in this column.

B–4. Location of Repair Parts

a. This appendix contains two cross reference indexes (sec. IV and V) to be used to locate a repair part when either the Federal stock number, reference number (manufacturer's part number), or reference designation is known. The first column in each index is prepared in alphanumerical sequence. The reference numbers (manufacturer's part numbers) are listed immediately following the last listed Federal stock number in the index of Federal stock numbers.

b. When the Federal stock number is known, follow the procedures given in (1), (2), and (3) below.

(1) Refer to the index of Federal stock numbers (sec IV) and locate the Federal stock number. The FSN is cross-referenced to the applicable figure and item or reference designation.

(2) Refer to the RPSTL (sec II) and locate the figure number (col 7a—20P, 10a—35P) and item or reference number (col 7b—20P, 10b—35P) as noted in the FSN index.

(3) If the FSN or manufacturer's part number is not listed in the index, refer to columns 2 and 3 of the RPSTL (sec II) and locate the Federal stock number by scrutiny of the numbers listed in columns 2 and 3.

c. When the reference designation is determined, refer to the reference designation index (sec V). The reference designations are listed in numeric-alpha ascending order and are cross referenced to the page number on which they appear in the repair parts list (sec II). Refer to the page number noted in the index and locate the reference designation (col 7b—20P, 10b—35P). If the word "REF" appears in the allowance column for the repair part, note the Federal stock number (col 2) or manufacturer's part number (col 3). Refer to the FSN index and note the reference designation for that FSN or part number. Refer to the reference designation index and note the page number given for the reference designation. Refer to the page noted in the RPSTL (sec II) and locate the reference designation in column 7b —20P, 10b—35P of the repair parts list.

B–5. Federal Supply Code for Manufacturers

This paragraph lists the Federal supply code and the associated manufacturer's name.

Code	*Manufacturer's name*
00141	Pic Design Corporation
00779	Amp Incorporated
00853	Sangamo Electric Company
01002	General Electric Company
01009	Alden Products Company
01121	Allen Bradley Company
02114	Ferroxcube Corporation of America
02289	Hi-G Incorporated
02660	Amphenol Corporation
02777	Hopkins Engineering Company
02985	Tepro Electric Corporation
04183	Count-O-Matic Incorporated
04713	Motorola Semiconductor Products
04865	Nyltite Corporation of America
05079	Tansitor Electronics
06540	Amatom Electronic
07047	The Ross Milton Company
07263	Fairchild Camera and Instrument
09922	Burndy Corporation
11139	Deutsch Company
12673	Wesco Electrical Company
12969	Unitrode Corporation
13499	Collins Radio Company
14304	RF Communications
15605	Cutler-Hammer
15801	Fenwall Electronics
16299	Corning Glass Works, Electronics Components Division
16733	Phelps Dodge Communications Co.
16735	Radio Corporation of America
17117	Electronic Molding Corporation
18911	Durant Manufacturing Company
21845	Solitron Devices
24046	Transitron Electronic Corp, Precision Connector Division
42498	National Company
44655	Ohmite Manufacturing Company
55938	Raytheon Company
56289	Spague Electric Company
59730	The Thomas and Betts Company
70903	Belden Corp.
71279	Cambridge Thermionic Corporation
71400	Bussman Division of McGraw-Edison
71590	Centralab Division of Globe-Union
71785	Cinch Manufacturing Company
72136	Electro Motive Manufacturing Co.
72962	Elastic Stop Nut Corporation of America
72982	Erie Technological Products
73445	Amperex Electronic Corporation
73734	Federal Screw Products
73899	JFD Electronics Company
74970	EF Johnson Company
75042	IRC Incorporated
75915	Littlefuse Incorporated
77342	Potter & Brumfield
78584	Stewart Stamping Corporation
79136	Waldes Kohinoor
79963	Zierick Manufacturing Corporation
80058	Jetds
80131	Electronic Industrial Association
80583	Hammarlund Mfg Co.
81073	Grayhill Incorporated
81349	Military Specifications
82389	Switchcraft Incorporated
82877	Rotron Manufacturing Company
83325	SNC Manufacturing Company
83330	Herman H. Smith
88044	Aeronautical Standards Group
90201	Mallory Capacitor Company
90634	Gulton Industries
91418	Radio Materials Company
91662	Elco Corporation
91929	Honeywell Incorporated
93713	United Transformers Company
93790	Cornell-Dublier Electronics
94696	Magnecraft Electric Company
95275	Vitramon Incorporated
95303	Radio Corporation of America
95987	Weckesser Company
96172	Ford Radio and Mica Corporation
96791	Amphenol Corporation
96906	Military Standards
97393	Shur-Lox Corporation
98291	Sealectro Corporation
98978	International Electronic Research Corporation
99378	Atlee Corporation
99800	Delevan Electronics Corporation
99813	Jan Hardware Manufacturing Company
99934	Renbrandt Incorporated

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
			5820-935-8038							A	A001	RADIO SET AN/GRC-165	EA											12 1-1	
P	C		5995-042-5478							B	A002	CABLE ASSEMBLY, POWER, ELECTRICAL CX-10820/GR (20FT)	EA		1	*	*	2	*	*	2	8	13	12 1-1	
X2	F									C	A003	CABLE, POWER, ELECTRICAL: 14304; W1038	FT		20									12 1-1	
X2	F		5935-802-5805							C	A004	CONNECTOR, PLUG, ELECTRICAL: 11139; DM9728-7S	EA		1									12 1-1	
P	C		5995-022-2743							B	A005	CABLE ASSEMBLY, POWER, ELECTRICAL CX-10821/GR (20FT)	EA		1	*	*	2	*	*	2	8	13	12 1-1	
X2	F									C	A006	CABLE, POWER, ELECTRICAL: SAME AS A003	FT		20									12 1-1	
X2	F		5935-802-5805							C	A007	CONNECTOR, PLUG, ELECTRICAL: SAME AS A004	EA		1									12 1-1	
P	O	S	5995-042-5481							B	A008	CABLE ASSEMBLY, POWER, ELECTRICAL CX-10822/U (20FT)	EA		1	*	*	2	*	*	2	8	13	12 1-1	
X2	F									C	A009	CABLE, POWER, ELECTRICAL: 14304; W1699	FT		20									12 1-1	
P	F		5935-802-5805							C	A010	CONNECTOR, PLUG, ELECTRICAL: 11139; DM9728-7S	EA		1	*	*	2	*	*	2	8	14	12 1-1	
P	F		5940-905-9037							C	A011	TERMINAL, LUG: 59730; C10-38	EA		2	*	2	2	*	2	2	19	26	12 1-1	
P	F		5940-905-9037							C	A012	TERMINAL, LUG: SAME AS A011	EA		REF									12 1-1	
P	C		5995-022-2742							B	A013	CABLE ASSEMBLY, RADIO FREQUENCY CG-3467/U (6FT3IN)	EA		1	*	*	2	*	*	2	8	13	12 1-1	
X2	F		5935-248-9499							C	A014	ADAPTER, CABLE TO CONNECTOR: 80058; UG175U	EA		2									12 1-1	
X2	F		5935-248-9499							C	A015	ADAPTER, CABLE TO CONNECTOR: SAME AS A014	EA		REF									12 1-1	
X2	F		6145-542-6092							C	A016	CABLE, RADIO FREQUENCY: 80058; RG58CU	FT		7									12 1-1	
X2	F		5935-257-8996							C	A017	CONNECTOR, PLUG, ELECTRICAL: 02660; 83-59	EA		2									12 1-1	

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F		5935-257-8996							C	A018 CONNECTOR, PLUG, ELECTRICAL: SAME AS A017	EA		REF									12 1-1	
A	O	S								B	A019 COUPLER, ANTENNA CU-1782/GRC-165	EA		1									12 1-1	
X2	O									C	A020 BOLT, SHOULDER: 14304; 425-0037	EA		4										
X2	O		5310-655-6534							*	A021 NUT, ASSEMBLED WASHER: 73734; 9227	EA		1										
X2	O									C	A022 BOLT, SHOULDER: SAME AS A020	EA		REF										
X2	O		5310-655-6534							*	A023 NUT, ASSEMBLED WASHER: SAME AS A021	EA		1										
X2	O									C	A024 BOLT, SHOULDER: SAME AS A020	EA		REF										
X2	O		5310-655-6534							*	A025 NUT, ASSEMBLED WASHER: SAME AS A021	EA		1										
X2	O									C	A026 BOLT, SHOULDER: SAME AS A020	EA		REF										
X2	O		5310-655-6534							*	A027 NUT, ASSEMBLED WASHER: SAME AS A021	EA		1										
M	D									C	A028 BRACKET, DOUBLE ANGLE: 14304; 162-2118	EA		1									4-4	1
X2	O		5310-969-6959							*	A029 NUT, ASSEMBLED WASHER: 73734; 9225	EA		4										
X2	O									*	A030 SCREW, MACHINE: 14304; H0620	EA		2										
X2	O									*	A031 SCREW, MACHINE: 14304; H0618	EA		2										
X2	O		5310-531-9514							*	A032 WASHER, FLAT: 88044; AN960C6	EA		2										
M	D									C	A033 BRACKET, DOUBLE ANGLE: 14304; 162-2159	EA		1									4-4	28
X2	O		5340-682-1815							C	A034 BUMPER, RUBBER: 73734; 1685	EA		4										
X2	O		5340-682-1815							C	A035 BUMPER, RUBBER: SAME AS A034	EA		REF										
X2	O		5340-682-1815							C	A036 BUMPER, RUBBER: SAME AS A034	EA		REF										
X2	O		5340-682-1815							C	A037 BUMPER, RUBBER: SAME AS A034	EA		REF										
X2	O		5330-574-6704							C	A038 PACKING WITH RETAINER: 15605; 32-341	EA		1										
X2	F									C	A039 CABLE, RADIO FREQUENCY: 80058; RG58U	FT		1										

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
				MODEL											DS			GS						
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1 - 20	(B) 21-50	(C) 51-100	(A) 1 - 20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5910-498-5715							C	A040	CAPACITOR ASSEMBLY: 14304; 162-2156	EA		3							18	12	4-4	34
X2	D		5305-889-3116							*	A041	SCREW, MACHINE: 96906; MS35206-213	EA		2										
X2	D		5310-515-7999							*	A042	WASHER, LOCK: 96906; MS35339-40	EA		2										
P	D		5910-498-5715							C	A043	CAPACITOR ASSEMBLY: SAME AS A040	EA		REF									4-4	32
X2	D		5305-889-3116							*	A044	SCREW, MACHINE: SAME AS A041	EA		2										
X2	D		5310-515-7999							*	A045	WASHER, LOCK: SAME AS A042	EA		2										
P	D		5910-498-5715							C	A046	CAPACITOR ASSEMBLY: SAME AS A040	EA		REF									4-4	31
X2	D		5305-889-3116							*	A046A	SCREW, MACHINE: SAME AS A041	EA		1										
X2	D									*	A047	SCREW, MACHINE: 14304; H0609	EA		1										
X2	D		5310-515-7999							*	A048	WASHER, LOCK: SAME AS A042	EA		2										
P	D									C	A049	CAPACITOR ASSEMBLY: 14304; 162-2157	EA		1									4-4	33
X2	D		5305-889-3116							*	A050	SCREW, MACHINE: SAME AS A041	EA		2										
X2	D		5310-515-7999							*	A051	WASHER, LOCK: SAME AS A042	EA		2										
P	D		5910-195-9771							C	A052	CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; 850S100N	EA		5							27	20		2C13
X2	D		5305-984-4983							*	A053	SCREW, MACHINE: 96906; MS35206-226	EA		1										
X2	D		5310-515-7997							*	A054	WASHER, LOCK: 96906; MS35339-41	EA		1										
P	D		5910-195-9771							C	A055	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A052	EA		REF										2C14
X2	D		5305-984-4983							*	A056	SCREW, MACHINE: SAME AS A053	EA		1										
X2	D		5310-515-7997							*	A057	WASHER, LOCK: SAME AS A054	EA		1										
P	D		5910-195-9771							C	A058	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A052	EA		REF										2C15
X2	D		5305-984-4983							*	A059	SCREW, MACHINE: SAME AS A053	EA		1										
X2	D		5310-515-7997							*	A060	WASHER, LOCK: SAME AS A054	EA		1										

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5910-989-5692							C	A061 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; 850S62Z	EA		1							8	6		2 C16
X2	D		5305-984-4983							*	A062 SCREW, MACHINE: SAME AS A053	EA		1										
X2	D		5310-515-7997							*	A063 WASHER, LOCK: SAME AS A054	EA		1										
P	D		5910-667-6106							C	A064 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; 850S50N	EA		1							8	6	4-4	44
X2	D		5305-984-4984							*	A065 SCREW, MACHINE: 96906; MS35206-227	EA		1										
X2	D		5310-531-9514							*	A066 WASHER, FLAT: SAME AS A032	EA		1										
X2	D		5310-515-7997							*	A067 WASHER, LOCK: SAME AS A054	EA		1										
P	D		5910-666-8019							C	A068 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; 850S75N	EA		1							8	6	4-4	45
X2	D		5305-984-4984							*	A069 SCREW, MACHINE: SAME AS A065	EA		1										
X2	D		5310-531-9514							*	A070 WASHER, FLAT: SAME AS A032	EA		1										
X2	D		5310-515-7997							*	A071 WASHER, LOCK: SAME AS A054	EA		1										
P	D		5910-085-0211							C	A072 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; 850S25Z	EA		1							8	6	4-4	43
X2	D		5305-984-4984							*	A073 SCREW, MACHINE: SAME AS A065	EA		1										
X2	D		5310-531-9514							*	A074 WASHER, FLAT: SAME AS A032	EA		1										
X2	D		5310-515-7997							*	A075 WASHER, LOCK: SAME AS A054	EA		1										
P	D		5910-195-9771							C	A076 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A052	EA		REF									4-4	46
X2	D		5305-984-4984							*	A077 SCREW, MACHINE: SAME AS A065	EA		1										
X2	D		5310-531-9514							*	A078 WASHER, FLAT: SAME AS A032	EA		1										
X2	D		5310-515-7997							*	A079 WASHER, LOCK: SAME AS A054	EA		1										
P	D		5910-195-9771							C	A080 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A052	EA		REF									4-4	47

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D		5305-984-4984							*	A081 SCREW, MACHINE: SAME AS A065	EA		1										
X2	D		5310-531-9514							*	A082 WASHER, FLAT: SAME AS A032	EA		1										
X2	D		5310-515-7997							*	A083 WASHER, LOCK: SAME AS A054	EA		1										
X2	D									C	A084 CHAIN, BEAD: 14304; H4813	EA		2									4-4	16
X2	D									C	A085 CHAIN, BEAD: SAME AS A084	EA		REF									4-4	20
X2	D									C	A086 CHAIN, STUD LINK: 14304; H4810	EA		1									4-4	4
M	D									C	A087 CHASSIS, ELECTRICAL EQUIPMENT: 14304; 162-2153	EA		1										
X2	D		5340-619-0188							C	A088 CLAMP, LOOP: 09922; HP2N	EA		2										
X2	D		5340-619-0188							C	A089 CLAMP, LOOP: SAME AS A088	EA		REF										
P	D		5950-498-2078							C	A090 COIL, RADIO FREQUENCY: 14304; 162-2169	EA		1							8	6	4-4	6
X2	D		5305-984-4988							*	A091 SCREW, MACHINE: 96906; MS35206-228	EA		2										
X2	D									*	A092 SCREW, MACHINE: SAME AS A031	EA		2										
X2	D		5310-531-9514							*	A093 WASHER, FLAT: SAME AS A032	EA		2										
P	D		5950-498-4715							C	A094 COIL, RADIO FREQUENCY: 74970; 229-203-11	EA		1							8	6	4-4	7
X2	D		5310-969-6959							*	A095 NUT, ASSEMBLED WASHER: SAME AS A029	EA		2										
X2	D									*	A096 SCREW, MACHINE: SAME AS A031	EA		2										
X2	D		5310-531-9514							*	A097 WASHER, FLAT: SAME AS A032	EA		2										
P	F		5935-149-4066							C	A098 CONNECTOR, PLUG, ELECTRICAL: 80058; UG88U	EA		1	*	*	2	*	*	2	8	14	4-4	48
M	D									C	A099 COUPLING ASSEMBLY: 99934; A2105	EA		1										
M	D									D	A100 COUPLING, SHAFT, FLEXIBLE: 14304; H4511	EA		1									4-4	10
M	D									D	A101 COUPLING, SHAFT, RIGID: 14304; H4510	EA		2									4-4	9

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1 - 20	DS (B) 21-50	DS (C) 51-100	GS (A) 1 - 20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
X2	D		5305-272-4123							*	A102 SETSCREW: 96906; MS51021-23	EA		2										
X2	D									D	A103 COUPLING, SHAFT, RIGID: SAME AS A101	EA		REF									4-4	11
X2	D		5305-272-4123							*	A104 SETSCREW: SAME AS A102	EA		2										
X2	D		3010-670-1701							C	A105 COUPLING, SHAFT, FLEXIBLE: 99813; AP15299	EA		2									4-4	25
X2	D		5305-543-5832							*	A106 SETSCREW: 96906; MS51021-11	EA		2										
X2	D		3010-670-1701							C	A107 COUPLING, SHAFT, FLEXIBLE: SAME AS A105	EA		REF									4-4	26
X2	D		5305-543-5832							*	A108 SETSCREW: SAME AS A106	EA		2										
M	D									C	A109 COVER, ANTENNA COUPLER: 14304; 425-2166	EA		1										
X2	F									*	A110 SCREW, MACHINE: 73734; 23026	EA		8										
X2	F		5310-782-1349							*	A111 WASHER, FLAT: 88044; AN960C4	EA		8										
P	O		5340-255-0286							C	A112 CRANK, HAND: 14304; 162-2180	EA		2	*	*	2	*	*	2	10	14	4-4	38
X2	O		5305-543-5832							*	A113 SETSCREW: SAME AS A106	EA		2										
X2	O									D	A114 KNOB: 14304; 162-2181	EA		1										
X2	O									D	A115 SCREW, SHOULDER: 99813; A100152	EA		1										
X2	O									D	A116 SPACER, SLEEVE: 99813; A100172	EA		1										
X2	O									D	A117 WASHER, FLAT: 99813; A100151	EA		1										
P	O		5340-255-0286							C	A118 CRANK, HAND: SAME AS A112	EA		REF									4-4	39
X2	O		5305-543-5832							*	A119 SETSCREW: SAME AS A106	EA		2										
X2	O									D	A120 KNOB: SAME AS A114	EA		1										
X2	O									D	A121 SCREW, SHOULDER: SAME AS A115	EA		1										
X2	O									D	A122 SPACER, SLEEVE: SAME AS A116	EA		1										
X2	O									D	A123 WASHER, FLAT: SAME AS A117	EA		1										

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									C	A124 GASKET: 14304; 425-0031	EA		2										
X2	F									C	A125 GASKET: SAME AS A124	EA		REF										
X2	F									C	A126 GASKET: 14304; 425-0033	EA		8										
X2	F									C	A127 GASKET: SAME AS A126	EA		REF										
X2	F									C	A128 GASKET: SAME AS A126	EA		REF										
X2	F									C	A129 GASKET: SAME AS A126	EA		REF										
X2	F									C	A130 GASKET: SAME AS A126	EA		REF										
X2	F									C	A131 GASKET: SAME AS A126	EA		REF										
X2	F									C	A132 GASKET: SAME AS A126	EA		REF										
X2	F									C	A133 GASKET: SAME AS A126	EA		REF										
X2	F									C	A134 GASKET: 14304; 425-0035	EA		4										
X2	F									C	A135 GASKET: SAME AS A134	EA		REF										
X2	F									C	A136 GASKET: SAME AS A134	EA		REF										
X2										C	A137 GASKET: SAME AS A134	EA		REF										
P	D									C	A138 INDICATOR, DIAL: 18911; 3Y8822LCL	EA		1							4	5	4-4	18
X2	D		5305-993-0190							*	A139 SCREW, MACHINE: 96906; MS35206-214	EA		2										
X2	D		5310-782-1349							*	A140 WASHER, FLAT: SAME AS A111	EA		2										
X2	D		5310-515-7999							*	A141 WASHER, LOCK: SAME AS A042	EA		2										
P	D									C	A142 INDICATOR, DIAL: 18911; 3Y8822RCL	EA		1							4	5	4-4	14
X2	D		5305-993-0190							*	A143 SCREW, MACHINE: SAME AS A139	EA		2										
X2	D		5310-782-1349							*	A144 WASHER, FLAT: SAME AS A111	EA		2										
X2	D		5310-515-7999							*	A145 WASHER, LOCK: SAME AS A042	EA		2										
P	D		5970-841-1255							C	A146 INSULATOR, FEEDTHRU: 74970; 135-51	EA		1							8	5	4-4	29
P	O		5355-942-7240							C	A147 KNOB: 55938; 70-8WL2G	EA		1	*	*	2	*	*	2	10	14	4-4	41

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
					MODEL											DS			GS						
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-20	(B) 21-50	(C) 51-100	(A) 1-20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	O									*	A148	SETSCREW: 96906; MS51021-38	EA		1									
X2	O		5305-551-0156							*	A149	SETSCREW: 96906; MS51021-31	EA		1									
X2	D									C	A150	PANEL, INDICATOR: 14304; 425-2109	EA		1									
X2	D									C	A151	PIN, STRAIGHT, HEADLESS: 14304; H4297	EA		2									
X2	D									C	A152	PIN, STRAIGHT, HEADLESS: SAME AS A151	EA		REF									
M	D									C	A153	PLATE, MOUNTING, CAPACITOR: 14304; 162-2120	EA		1								4-4	42
M	D									C	A154	PLATE, MOUNTING, INDICATOR: 14304; 162-2119	EA		1								4-4	22
X2	D		5305-889-2999							*	A155	SCREW, MACHINE: 96906; MS35206-217	EA		2									
X2	D		5310-782-1349							*	A156	WASHER, FLAT: SAME AS A111	EA		2									
X2	D		5310-515-7999							*	A157	WASHER, LOCK: SAME AS A042	EA		2									
P	D		5905-279-1877							C	A158	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF242J	EA		1							13	14		
P	D		5905-279-3506							C	A159	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF332J	EA		1							33	42		
X2	D									C	A160	SHAFT, SHOULDERED: 14304; 162-2161	EA		1								4-4	40
X2	D									C	A161	SHAFT, SHOULDERED: 14304 162-2188	EA		1								4-4	13
X2	D									C	A162	SHAFT, SHOULDERED: 14304 162-2189	EA		1								4-4	37
X2	D									C	A163	SHAFT, STRAIGHT: 14304; 162-2122	EA		1								4-4	27
X2	D									C	A164	SPACER, RING: 14304; 162-2160	EA		1								4-4	3
X2	D		5310-969-6959							*	A165	NUT, ASSEMBLED WASHER: SAME AS A029	EA		1								4-4	2
X2	D		5305-984-6221							*	A166	SCREW, MACHINE: 96906; MS35206-234	EA		1									
X2	D									C	A167	SPACER, SLEEVE: 14304; H4609	EA		2								4-4	23
X2	D									C	A168	SPACER, SLEEVE: SAME AS A167	EA		REF								4-4	24
X2	D									C		Bushing: 14304; H0004	EA		2									

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		3020-244-9921							C	A169	SPROCKET, WHEEL: 14304; 162-0143	EA		2							13	114	4-4	8
X2	D		5305-531-0137							*	A170	SETSCREW: 96906; MS51021-21	EA		1										
P	D		3020-244-9921							C	A171	SPROCKET, WHEEL: SAME AS A169	EA		REF									4-4	5
X2	D		5305-531-0137							*	A172	SETSCREW: SAME AS A170	EA		1										
P	D		3020-244-9922							C	A173	SPROCKET, WHEEL: 14304; H4811	EA		2							10	76	4-4	17
X2	D		5305-543-5832							*	A174	SETSCREW: SAME AS A106	EA		2										
P	D		3020-244-9922							C	A175	SPROCKET, WHEEL: SAME AS A173	EA		REF									4-4	21
X2	D		5305-543-5832							*	A176	SETSCREW: SAME AS A106	EA		2										
P	D		3020-253-0759							C	A177	SPROCKET, WHEEL: 14304; H4812	EA		2							10	76	4-4	19
X2	D		5305-543-5832							*	A178	SETSCREW: SAME AS A106	EA		2										
P	D		3020-253-0759							C	A179	SPROCKET, WHEEL: SAME AS A177	EA		REF									4-4	15
X2	D		5305-543-5832							*	A180	SETSCREW: SAME AS A106	EA		2										
P	F	S	5820-135-0393							C	A181	STANDING WAVE RATIO INDICATOR SUBASSEMBLY: 14304; 162-2123	EA		1	*	2	3	2	2	2	33	3	4-3	2A1
X2	F		5305-993-0190							*	A181A	SCREW, MACHINE: SAME AS A139	EA		4										
X2	F		5310-515-7999							*	A181B	WASHER, LOCK: SAME AS A042	EA		4										
M	D									D	A182	BRACKET, ANGLE: 14304; 363-0014	EA		1										
X2	D									*	A183	SCREW, TAPPING, THREAD CUTTING: 14304; HO520	EA		2										
P	D		5910-552-0359							D	A184	CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; DDM502	EA		2							13	12	4-3	2A1C5
P	D		5910-552-0359							D	A185	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A184	EA		REF									4-3	2A1C6
P	D		5910-088-1625							D	A186	CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15F201J500	EA		2							18	18	4-3	2A1C3
P	D		5910-088-1625							D	A187	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A186	EA		REF									4-3	2A1C4

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(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5910-901-5909							D	A188	CAPACITOR, VARIABLE, GLASS DIELECTRIC: 73899; VC10GWY	EA		2							13	8	4-3	2A1C1
P	D		5910-901-5909							D	A189	CAPACITOR, VARIABLE, GLASS DIELECTRIC: SAME AS A188	EA		REF									4-3	2A1C2
M	D									D	A190	CHASSIS, ELECTRICAL EQUIPMENT: 14304; 363-0012	EA		1										
P	D		5950-814-1608							D	A191	COIL, RADIO FREQUENCY: 99800; 2500-36	EA		2							19	24	4-3	2A1L2
P	D		5950-814-1608							D	A192	COIL, RADIO FREQUENCY: SAME AS A191	EA		REF									4-3	2A1L3
P	F		5935-910-8239							D	A193	CONNECTOR, RECEPTACLE, ELECTRICAL: 80058; SO-239	EA		1	*	*	*	*	*	*	5	14	4-3	2A1J1
X2	F									*	A194	NUT, PLAIN, HEXAGON: 14304; H0258	EA		4										
X2	F		5305-889-3116							*	A195	SCREW, MACHINE: SAME AS A041	EA		4										
X2	F		5310-515-7999							*	A196	WASHER, LOCK: SAME AS A042	EA		4										
P	F		5935-892-9035							D	A197	CONNECTOR, RECEPTACLE, ELECTRICAL: 80058; UG657U	EA		1	*	*	*	*	*	*	5	14	4-3	2A1J3
P	F		5340-404-4157							D	A198	GASKET: 14304; 162-2140	EA		1	*	*	*	*	*	*	5	23		
P	D		5905-279-1733							D	A199	RESISTOR, FIXED, COMPOSITION: 81349; RC32GF680J	EA		2							13	14	4-3	2A1R1
P	D		5905-279-1733							D	A200	RESISTOR, FIXED, COMPOSITION: SAME AS A199	EA		REF									4-3	2A1R2
P	D		5961-760-9548							D	A201	SEMICONDUCTOR DEVICE, DIODE: 80131; 1N277	EA		2							13	30	4-3	2A1CR1
P	D		5961-760-9548							D	A202	SEMICONDUCTOR DEVICE, DIODE: SAME AS A201	EA		REF									4-3	2A1CR2
X2	D									D	A203	SPACER, RING: 14304; 162-2145	EA		1										
X2	D									D	A204	SPACER, RING: 14304; 162-2149	EA		1										
X2	D									D	A205	SPACER, SLEEVE: 14304; 162-2165	EA		1										
X2	D									D	A206	SPACER, STEPPED: 14304; H4816	EA		4										

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D									D	A207	SPACER, STEPPED: SAME AS A206	EA		REF										
X2	D									D	A208	SPACER, STEPPED: SAME AS A206	EA		REF										
X2	D									D	A209	SPACER, STEPPED: SAME AS A206	EA		REF										
X2	D									D	A210	TERMINAL BOARD: 14304; 162-2141	EA		1										
X2	D		5305-993-0190							*	A211	SCREW, MACHINE: SAME AS A139	EA		4										
X2	D		5310-515-7999							*	A212	WASHER, LOCK: SAME AS A042	EA		4										
X2	D									D	A213	TERMINAL, STUD: 71279; 4182-1-05-19	EA		6										
X2	D									D	A214	TERMINAL, STUD: SAME AS A213	EA		REF										
X2	D									D	A215	TERMINAL, STUD: SAME AS A213	EA		REF										
X2	D									D	A216	TERMINAL, STUD: SAME AS A213	EA		REF										
X2	D									D	A217	TERMINAL, STUD: SAME AS A213	EA		REF										
X2	D									D	A218	TERMINAL, STUD: SAME AS A213	EA		REF										
P	D		5950-498-2077							D	A219	TRANSFORMER, RADIO FREQUENCY: 14304; 162-2151	EA		1							8	7	4-3	2A11
X2	D									C	A220	STUD, PLAIN: 14304; 162-2116	EA		2										
X2	D									*	A221	NUT, ASSEMBLED WASHER: 73734; 9226	EA		2										
X2	D		5310-063-9603							*	A222	NUT, PLAIN, HEXAGON: 73734; 8008	EA		2										
X2	D									C	A223	STUD, PLAIN: SAME AS A220	EA		REF										
X2	D									*	A224	NUT, ASSEMBLED WASHER: SAME AS A221	EA		2										
X2	D		5310-063-9603							*	A225	NUT, PLAIN, HEXAGON: SAME AS A222	EA		2										
P	F		5930-910-2865							C	A226	SWITCH, ROTARY: 14304; S0110	EA		1	*	*	*	*	*	*	5	15	4-4	30
X2	F									*	A227	NUT, ASSEMBLED WASHER: SAME AS A221	EA		2										
X2	F		5305-984-6191							*	A228	SCREW, MACHINE: 96906; MS35206-243	EA		2										
X2	F		5310-685-3744							*	A229	WASHER, FLAT: 88044; AN960C8	EA		2										

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F		5310-550-4718							*	A230 WASHER, LOCK: 96906; MS35339-42	EA		2										
P	F		5930-655-1582							C	A231 SWITCH, TOGGLE: 15605; 8825K5	EA		1	*	2	2	*	2	2	16	60	4-4	36
X2	D		5940-953-2142							C	A232 TERMINAL, LUG: 00779; 322236	EA		4										
X2	D		5940-953-2142							C	A233 TERMINAL, LUG: SAME AS A232	EA		REF										
X2	D		5940-953-2142							C	A234 TERMINAL, LUG: SAME AS A232	EA		REF										
X2	D		5940-953-2142							C	A235 TERMINAL, LUG: SAME AS A232	EA		REF										
X2	D									C	A236 TERMINAL, LUG: 73734; 1953	EA		14										
X2	D		5305-984-4983							*	A237 SCREW, MACHINE: SAME AS A053	EA		1										
X2	D		5310-515-7997							*	A238 WASHER, LOCK: SAME AS A054	EA		1										
X2	D									C	A239 TERMINAL, LUG: SAME AS A236	EA		REF										
X2	D		5305-984-4983							*	A240 SCREW, MACHINE: SAME AS A053	EA		1										
X2	D		5310-515-7997							*	A241 WASHER, LOCK: SAME AS A054	EA		1										
X2	D									C	A242 TERMINAL, LUG: SAME AS A236	EA		REF										
X2	D		5305-984-4983		•					*	A243 SCREW, MACHINE: SAME AS A053	EA		1										
X2	D		5310-515-7997							*	A244 WASHER, LOCK: SAME AS A054	EA		1										
X2	D									C	A245 TERMINAL, LUG: SAME AS A236	EA		REF										
X2	D		5305-984-4983							*	A246 SCREW, MACHINE: SAME AS A053	EA		1										
X2	D		5310-515-7997							*	A247 WASHER, LOCK: SAME AS A054	EA		1										
X2	D									C	A248 TERMINAL, LUG: SAME AS A236	EA		REF										
X2	D		5305-984-4983							*	A249 SCREW, MACHINE: SAME AS A053	EA		1										
X2	D		5310-515-7997							*	A250 WASHER, LOCK: SAME AS A054	EA		1										
X2	D									C	A251 TERMINAL, LUG: SAME AS A236	EA		REF										
X2	D		5305-984-4983							*	A252 SCREW, MACHINE: SAME AS A053	EA		1										
X2	D		5310-515-7997							*	A253 WASHER, LOCK: SAME AS A054	EA		1										

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1 - 20	(B) 21-50	(C) 51-100	GS (A) 1 - 20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. QTY	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE																								
X2	D									C	A254	TERMINAL, LUG: SAME AS A236	EA		REF									
X2	D		5305-984-4983							*	A255	SCREW, MACHINE: SAME AS A053	EA		1									
X2	D		5310-515-7997							*	A256	WASHER, LOCK: SAME AS A054	EA		1									
X2	D									C	A257	TERMINAL, LUG: SAME AS A236	EA		REF									
X2	D		5305-984-4983							*	A258	SCREW, MACHINE: SAME AS A053	EA		1									
X2	D		5310-515-7997							*	A259	WASHER, LOCK: SAME AS A054	EA		1									
X2	D									C	A260	TERMINAL, LUG: SAME AS A236	EA		REF									
X2	D		5305-984-4983							*	A261	SCREW, MACHINE: SAME AS A053	EA		1									
X2	D		5310-515-7997							*	A262	WASHER, LOCK: SAME AS A054	EA		1									
X2	D									C	A263	TERMINAL, LUG: SAME AS A236	EA		REF									
X2	D									C	A264	TERMINAL, LUG: SAME AS A236	EA		REF									
X2	D									C	A265	TERMINAL, LUG: SAME AS A236	EA		REF									
X2	D									C	A266	TERMINAL, LUG: SAME AS A236	EA		REF									
X2	D									C	A267	TERMINAL, LUG: SAME AS A236	EA		REF									
X2	D									C	A268	TERMINAL, LUG: 73734; 1954	EA		3									
X2	D									C	A269	TERMINAL, LUG: SAME AS A268	EA		REF									
X2	D									C	A270	TERMINAL, LUG: SAME AS A268	EA		REF									
X2	D									C	A271	TERMINAL, LUG: 79963; 121-000	EA		2									
X2	D									C	A272	TERMINAL, LUG: SAME AS A271	EA		REF									
X2	D									C	A273	TERMINAL, STUD: 73734; 23108	EA		1									
X2	D		5310-958-8834							*	A274	NUT, PLAIN, HEXAGON: 73734; 8014	EA		2									
X2	D		5310-637-9547							*	A275	WASHER, LOCK: 96906; MS35339-44	EA		2									
X2	D									*	A276	WASHER, LOCK: 73734; 1326	EA		1									
P	F		6625-246-4546							C	A277	WATTMETER: 14304; 162-0185	EA		1	*	*	*	*	*	*	5	6	4-4	35

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									C	A278 WINDOW, OBSERVATION: 14304; 162-2127	EA		1									12 1-1	
P	O		5995-022-2741							B	A279 LEAD, ELECTRICAL CX-10817/U (2FT6IN)	EA		1	*	*	*	*	*	*	5	3	12 1-1	
P	O		5995-245-1892							B	A280 LEAD, ELECTRICAL: 14304; 162-2175	EA		1	*	*	*	*	*	*	4	3	12 1-1	
P	C		5965-102-3803							B	A281 MICROPHONE MAGNETIC: M-143/GR	EA		1	*	*	*	*	*	*	4	15	12 1-1	
X2	F		5935-801-8314							C	A282 CONNECTOR, PLUG, ELECTRICAL: 11139; DM9728-7P	EA		1									12 1-1	
A	F	S								B	A283 MOUNTING MT-3975/GRC-165	EA		1									12 1-1	
X2	O		4130-910-4622							C	A284 FILTER, AIR CONDITIONING: 14304; MP1187	EA		1									12 1-1	
A	F	S								B	A285 MOUNTING MT-3976/GRC-165	EA		1									12 1-1	
A	O	S								B	A286 RECEIVER-XMTR, RADIO RT-902/GRC-165	EA		1									12 1-1	
P	F		5930-065-6160							C	A287 ADAPTER, SWITCH ACTUATOR: 91929; JS221	EA		1	*	*	*	*	*	*	5	12		
P	F	S	5820-135-0392							C	A288 AMPLIFIER, AUDIO FREQUENCY: 14304; 162-1700	EA		1	2	2	3	2	2	2	40	3	3-46	1A16
P	D		5910-225-7331							D	A289 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; UK10-474	EA		1							13	12	3-46	1A16C2
P	D		5910-934-2865							D	A290 CAPACITOR, FIXED, ELECTROLYTIC: 05079; S15-20C2MI	EA		1							113	232	3-46	1A16C1
P	D		5910-018-1944							D	A291 CAPACITOR, FIXED, ELECTROLYTIC: 05079; S33-10C2MI	EA		1							8	8	3-46	1A16C3
P	D		5910-927-2836							D	A292 CAPACITOR, FIXED, ELECTROLYTIC: 56289; 600D587G015DL0	EA		1							8	8	3-46	1A16C4
P	D		5910-835-2718							D	A293 CAPACITOR, FIXED, PLASTIC DIELECTRIC: 93790; WMF1S22	EA		1							13	18	3-46	1A16C5
P	D		5935-909-5712							D	A294 CONTACT STRIP 91662; 02-004-113-6200	EA		1							8	4	3-46	1A16P26
P	D									D	A295 HEAT SINK, ELECTRICAL-ELECTRONIC COMPONENT: 14304; 162-1726	EA		1							8	13		
X2	D		5310-063-8761							*	A296 NUT, PLAIN, HEXAGON: 73734; 8003	EA		2										

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1 - 20	DS (B) 21-50	DS (C) 51-100	GS (A) 1 - 20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D		5305-889-2997							*	A297	SCREW, MACHINE: 96906; MS35206-215	EA		2								3-46	1A16R1
X2	D		5310-515-7999							*	A298	WASHER, LOCK: SAME AS A042	EA		2								3-46	1A16R2
X2	D									D	A299	PRINTED WIRING BOARD: 14304; 162-1723	EA		1								3-46	1A16R3
P	D		5905-299-1971							D	A300	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF822J	EA		1							53	84	3-46	1A16R4
P	D		5905-185-8510							D	A301	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF103J	EA		1							83	140	3-46	1A16R5
P	D		5905-279-3506							D	A302	RESISTOR, FIXED, COMPOSITION: SAME AS A159	EA		1									3-46	1A16R6
P	D		5905-279-1757							D	A303	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF152J	EA		1							13	14	3-46	1A16R7
P	D		5905-190-8889							D	A304	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF101J	EA		1							59	91	3-46	1A16R8
P	D		5905-192-4490							D	A305	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF330J	EA		1							8	7	3-46	1A16R9
P	D		5905-192-3973							D	A306	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF471J	EA		1							27	35	3-46	1A16R10
P	D		5905-195-6806							D	A307	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF102J	EA		1							27	35	3-46	1A16CR1
P	D		5905-993-6985							D	A308	RESISTOR, FIXED, WIRE WOUND: 75042; EWHR27K	EA		2							13	24	3-46	1A16Q1
P	D		5905-993-6985							D	A309	RESISTOR, FIXED, WIRE WOUND: SAME AS A308	EA		REF									3-46	1A16Q2
P	D		5961-921-3781							D	A310	SEMICONDUCTOR DEVICE, DIODE: 80131; 1N4001	EA		1							53	165	3-46	1A16Q3
P	D		5961-465-6555							D	A311	TRANSISTOR: 07263; 2N3642	EA		2							27	75	3-46	1A16Q4
P	D		5961-901-4862							D	A312	TRANSISTOR: 07263; 2N3638	EA		2							40	120	3-46	1A16Q5
P	D		5961-465-6555							D	A313	TRANSISTOR: SAME AS A311	EA		REF									3-46	1A16R11
P	D		5961-901-4862							D	A314	TRANSISTOR: SAME AS A312	EA		REF									3-46	1A16R12
P	D		5961-728-6941							D	A315	TRANSISTOR: 04713; 2N4918	EA		1							8	15	3-46	1A16R13

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5961-058-1192							D	A316 TRANSISTOR: 04713; 2N4921	EA		1							8	15	3-46	1A16Q6
P	F	S	5820-135-0391							C	A317 AMPLIFIER, INTERMEDIATE FREQUENCY: 14304; 162-0700	EA		1	3	7	13	3	7	13	164	3	3-24	1A7
X2	F		5305-889-3116							*	A318 SCREW, MACHINE: SAME AS A041	EA		3										
X2	F		5305-984-4984							*	A319 SCREW, MACHINE: SAME AS A065	EA		2										
X2	F		5310-782-1349							*	A320 WASHER, FLAT: SAME AS A111	EA		3										
X2	F		5310-515-7999							*	A321 WASHER, LOCK: SAME AS A042	EA		3										
X2	F		5310-515-7997							*	A322 WASHER, LOCK: SAME AS A054	EA		2										
P	D		5910-401-6254							D	A323 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 5815-000Y5U0104Z	EA		27							460	756	3-24	1A7C1
P	D		5910-401-6254							D	A324 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C3
P	D		5910-401-6254							D	A325 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C5
P	D		5910-401-6254							D	A326 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C6
P	D		5910-401-6254							D	A327 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C7
P	D		5910-401-6254							D	A328 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C9
P	D		5910-401-6254							D	A329 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C10
P	D		5910-401-6254							D	A330 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C11
P	D		5910-401-6254							D	A331 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C13
P	D		5910-401-6254							D	A332 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C14
P	D		5910-401-6254							D	A333 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C16

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5910-401-6254							D	A334 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C17
P	D		5910-401-6254							D	A335 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C18
P	D		5910-401-6254							D	A336 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C19
P	D		5910-401-6254							D	A337 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C20
P	D		5910-401-6254							D	A338 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C21
P	D		5910-401-6254							D	A339 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C22
P	D		5910-401-6254							D	A340 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C24
P	D		5910-401-6254							D	A341 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C25
P	D		5910-401-6254							D	A342 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C26
P	D		5910-401-6254							D	A343 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C28
P	D		5910-401-6254							D	A344 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C30
P	D		5910-401-6254							D	A345 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C31
P	D		5910-401-6254							D	A346 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C36
P	D		5910-401-6254							D	A347 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C37
P	D		5910-401-6254							D	A348 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C38
P	D		5910-401-6254							D	A349 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-24	1A7C40

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5910-934-2865							D	A350 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		5									3-24	1A7C2
P	D		5910-934-2865							D	A351 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-24	1A7C29
P	D		5910-934-2865							D	A352 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-24	1A7C33
P	D		5910-996-0666							D	A353 CAPACITOR, FIXED, ELECTROLYTIC: 05079; S220-10C4MI	EA		1							18	24	3-24	1A7C34
P	D		5910-934-2865							D	A354 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-24	1A7C35
P	D		5910-934-2865							D	A355 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-24	1A7C39
P	D		5910-851-3328							D	A356 CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM15F821G	EA		7							83	120	3-24	1A7C4
P	D		5910-851-3328							D	A357 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		REF									3-24	1A7C8
P	D		5910-851-3328							D	A358 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		REF									3-24	1A7C12
P	D		5910-851-3328							D	A359 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		REF									3-24	1A7C15
P	D		5910-851-3328							D	A360 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		REF									3-24	1A7C23
P	D		5910-851-3328							D	A361 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		REF									3-24	1A7C27
P	D		5910-851-3328							D	A362 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		REF									3-24	1A7C32
P	D		5950-060-9188							D	A363 COIL, RADIO FREQUENCY: 99800; 2500-28	EA		3							53	66	3-24	1A7L1
P	D		5950-060-9188							D	A364 COIL, RADIO FREQUENCY: SAME AS A363	EA		REF									3-24	1A7L2
P	D		5950-060-9188							D	A365 COIL, RADIO FREQUENCY: SAME AS A363	EA		REF									3-24	1A7L3
P	D		5950-088-1720							D	A366 COIL, RADIO FREQUENCY: 99800; 1537-94	EA		2							89	126	3-24	1A7L4

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5950-088-1720							D	A367	COIL, RADIO FREQUENCY: SAME AS A366	EA		REF								3-24	1A7L5
P	D		5935-704-3506							D	A368	CONNECTOR, RECEPTACLE, ELECTRICAL: 16733; 1114	EA		1							83	280	3-24	1A7J22
P	D		5935-498-2088							D	A369	CONTACT ASSEMBLY, ELECTRICAL: 91662; 02-008-113-6200	EA		1							8	4	3-24	1A7J20
X2	D									D	A370	PRINTED WIRING BOARD: 14304; 162-0706	EA		1									3-24	1A7MP1
P	D		5945-914-2323							D	A371	RELAY, ARMATURE: 94696; W103PCX2	EA		1							8	9	3-24	1A7K1
P	D		5905-683-2238							D	A372	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF103J	EA		7							83	140	3-24	1A7R1
P	D		5905-681-9970							D	A373	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF822J	EA		2							27	35	3-24	1A7R2
P	D		5905-855-3173							D	A374	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF682J	EA		2							40	56	3-24	1A7R3
P	D		5905-686-9996							D	A375	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF821J	EA		6							40	56	3-24	1A7R4
P	D		5905-683-2242							D	A376	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF471J	EA		2							18	21	3-24	1A7R5
P	D		5905-683-2238							D	A377	RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-24	1A7R6
P	D		5905-681-8818							D	A378	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF153J	EA		2							89	154	3-24	1A7R7
P	D		5905-686-9996							D	A379	RESISTOR, FIXED, COMPOSITION: SAME AS A375	EA		REF									3-24	1A7R8
P	D		5905-683-2240							D	A380	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF221J	EA		2							19	28	3-24	1A7R9
P	D		5905-683-2238							D	A381	RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-24	1A7R10
P	D		5905-683-2238							D	A382	RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-24	1A7 R11
P	D		5905-686-9996							D	A383	RESISTOR, FIXED, COMPOSITION: SAME AS A375	EA		REF									3-24	1A7 R12

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5905-686-9996							D	A384	RESISTOR, FIXED, COMPOSITION: SAME AS A375	EA		REF									3-24	1A7R13
P	D		5905-807-6269							D	A385	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF131J	EA		1							8	7	3-24	1A7R14
P	D		5905-683-2242							D	A386	RESISTOR, FIXED, COMPOSITION: SAME AS A376	EA		REF									3-24	1A7R15
P	D		5905-835-1613							D	A387	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF200J	EA		1							8	7	3-24	1A7R16
P	D		5905-681-9969							D	A388	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF332J	EA		5							118	210	3-24	1A7R17
P	D		5905-686-3798							D	A389	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF272J	EA		2							46	70	3-24	1A7R18
P	D		5905-686-9994							D	A390	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF122J	EA		2							59	91	3-24	1A7R19
P	D		5905-683-2236							D	A391	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF391J	EA		2							27	35	3-24	1A7R20
P	D		5905-803-3468							D	A392	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF106J	EA		1							8	7	3-24	1A7R21
P	D		5905-681-9970							D	A393	RESISTOR, FIXED, COMPOSITION: SAME AS A373	EA		REF									3-24	1A7R22
P	D		5905-683-7723							D	A394	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF152J	EA		2							65	105	3-24	1A7R23
P	D		5905-817-7971							D	A395	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF100J	EA		1							8	7	3-24	1A7R24
P	D		5905-681-9969							D	A396	RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-24	1A7R25
P	D		5905-686-3798							D	A397	RESISTOR, FIXED, COMPOSITION: SAME AS A389	EA		REF									3-24	1A7R26
P	D		5905-686-9994							D	A398	RESISTOR, FIXED, COMPOSITION: SAME AS A390	EA		REF									3-24	1A7R27
P	D		5905-686-9998							D	A399	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF472J	EA		2							13	14	3-24	1A7R28

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1 - 20	DS (B) 21-50	DS (C) 51-100	GS (A) 1 - 20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5905-855-3173							D	A400 RESISTOR, FIXED, COMPOSITION: SAME AS A374	EA		REF									3-24	1A7R29
P	D		5905-725-6995							D	A401 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF271J	EA		1							18	21	3-24	1A7R30
P	D		5905-686-9996							D	A402 RESISTOR, FIXED, COMPOSITION: SAME AS A375	EA		REF									3-24	1A7R31
P	D		5905-686-9996							D	A403 RESISTOR, FIXED, COMPOSITION: SAME AS A375	EA		REF									3-24	1A7R32
P	D		5905-683-2238							D	A404 RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-24	1A7R33
P	D		5905-686-9998							D	A405 RESISTOR, FIXED, COMPOSITION: SAME AS A399	EA		REF									3-24	1A7R34
P	D		5905-681-9969							D	A406 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-24	1A7R36
P	D		5905-681-9969							D	A407 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-24	1A7R37
P	D		5905-683-2235							D	A408 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF680J	EA		1							13	14	3-24	1A7R38
P	D		5905-681-9969							D	A409 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-24	1A7R40
P	D		5905-681-8818							D	A410 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF									3-24	1A7R41
P	D		5905-683-7723							D	A411 RESISTOR, FIXED, COMPOSITION: SAME AS A394	EA		REF									3-24	1A7R42
P	D		5905-681-6462							D	A412 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF102J	EA		2							46	70	3-24	1A7R43
P	D		5905-683-2238							D	A413 RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-24	1A7R44
P	D		5905-681-6462							D	A414 RESISTOR, FIXED, COMPOSITION: SAME AS A412	EA		REF									3-24	1A7R45
P	D		5905-683-2243							D	A415 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF151J	EA		2							18	21	3-24	1A7R46

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5905-683-2238							D	A416 RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-24	1A7R47
P	D		5905-683-2243							D	A417 RESISTOR, FIXED, COMPOSITION: SAME AS A415	EA		REF									3-24	1A7R48
P	D		5905-683-2240							D	A418 RESISTOR, FIXED, COMPOSITION: SAME AS A380	EA		REF									3-24	1A7R49
P	D		5905-683-2246							D	A419 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF473J	EA		1							8	7	3-24	1A7R50
P	D		5905-683-2236							D	A420 RESISTOR, FIXED, COMPOSITION: SAME AS A391	EA		REF									3-24	1A7R51
P	D		5905-903-0773							D	A421 RESISTOR, VARIABLE: 96791; 2901W103	EA		1							19	32	3-24	1A7R35
P	D		5905-903-0772							D	A422 RESISTOR, VARIABLE: 96791; 2901W501	EA		1							19	32	3-24	1A7R39
P	D		5961-556-2091							D	A423 SEMICONDUCTOR DEVICE, DIODE: 80131; 1N270	EA		7							198	765	3-24	1A7CR1
P	D		5961-556-2091							D	A424 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-24	1A7CR2
P	D		5961-556-2091							D	A425 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-24	1A7CR3
P	D		5961-556-2091							D	A426 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-24	1A7CR4
P	D		5961-556-2091							D	A427 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-24	1A7CR5
P	D		5961-556-2091							D	A428 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-24	1A7CR6
P	D		5961-556-2091							D	A429 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-24	1A7CR7
X2	D		5940-660-3759							D	A430 TERMINAL, STUD: 71279; 2043-3	EA		1									3-24	1A7E167
P	D		5950-498-2072							D	A431 TRANSFORMER, INTERMEDIATE FREQUENCY: 14304; 162-0162	EA		7							59	91	3-24	1A7T1
P	D		5950-498-2072							D	A432 TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS A431	EA		REF									3-24	1A7T2

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5950-498-2072							D	A433 TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS A431	EA		REF									3-24	1A7T3
P	D		5950-498-2072							D	A434 TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS A431	EA		REF									3-24	1A7T4
P	D		5950-498-2072							D	A435 TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS A431	EA		REF									3-24	1A7T5
P	D		5950-498-2072							D	A436 TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS A431	EA		REF									3-24	1A7T6
P	D		5950-498-2072							D	A437 TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS A431	EA		REF									3-24	1A7T7
P	D		5961-752-6119							D	A438 TRANSISTOR: 16736; 2N1224	EA		4							27	75	3-24	1A7Q1
P	D		5961-752-6119							D	A439 TRANSISTOR: SAME AS A438	EA		REF									3-24	1A7Q2
P	D		5961-752-6119							D	A440 TRANSISTOR: SAME AS A438	EA		REF									3-24	1A7Q3
P	D		5961-998-1920							D	A441 TRANSISTOR: 73445; 2N2084	EA		4							113	420	3-24	1A7Q4
P	D		5961-998-1920							D	A442 TRANSISTOR: SAME AS A441	EA		REF									3-24	1A7Q5
P	D		5961-752-6119							D	A443 TRANSISTOR: SAME AS A438	EA		REF									3-24	1A7Q6
P	D		5961-998-1920							D	A444 TRANSISTOR: SAME AS A441	EA		REF									3-24	1A7Q7
P	D		5961-998-1920							D	A445 TRANSISTOR: SAME AS A441	EA		REF									3-24	1A7Q8
P	D		5961-465-6555							D	A446 TRANSISTOR: SAME AS A311	EA		1									3-24	1A7Q9
P	D		5961-877-6704							D	A447 TRANSISTOR: 16736; 2N1479	EA		1							19	60	3-24	1A7Q10
A	F									C	A448 AMPLIFIER, RADIO FREQUENCY: 14304; 162-0200	EA		1									3-4	1A1
X2	F		5305-984-4983							*	A449 SCREW, MACHINE: SAME AS A053	EA		6										
X2	F		5310-515-7997							*	A450 WASHER, LOCK: SAME AS A054	EA		6										
P	D		5820-135-0389							D	A451 AMPLIFIER SUBASSEMBLY: 14304; 162-0206	EA		1							27	3	3-6	1A1A1
X2	D									*	A452 SCREW, TAPPING, THREAD CUTTING: 14304; H0504	EA		4									6-11	93

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D									E	A453 CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM15E820G	EA		1									3-6	1A1A1C2
X2	D		5910-952-1708							E	A454 CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM15F471G	EA		1									3-6	1A1A1C3
X2	D		5910-069-2045							E	A455 CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM19F112G	EA		1									3-6	1A1A1C7
X2	D									E	A456 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15C050J500	EA		2									3-6	1A1A1C8
X2	D									E	A457 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15C100J500	EA		1									3-6	1A1A1C9
X2	D									E	A458 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15C150J500	EA		1									3-6	1A1A1C10
X2	D									E	A459 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15E270J500	EA		1									3-6	1A1A1C11
X2	D									E	A460 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A456	EA		REF									3-6	1A1A1C12
X2	D		5910-779-3456							E	A461 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: 72982; 538-006E2P094R	EA		3									3-6	1A1A1C1
X2	D		5910-779-3456							E	A462 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS A461	EA		REF									3-6	1A1A1C4
X2	D		5910-779-3456							E	A463 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS A461	EA		REF									3-6	1A1A1C6
X2	D									E	A464 CRYSTAL UNIT, QUARTZ: 14304; 162-0196	EA		1									3-6	1A1A1Y1
X2	D									E	A465 CRYSTAL UNIT, QUARTZ: 14304; 162-0193	EA		1									3-6	1A1A1Y2
X2	D									E	A466 PRINTED WIRING BOARD: 14304; 162-0203	EA		1										1A1A1MP1
X2	D		5905-299-1971							E	A467 RESISTOR, FIXED, COMPOSITION: SAME AS A300	EA		2									3-6	1A1A1R19
X2	D		5905-299-1971							E	A468 RESISTOR, FIXED, COMPOSITION: SAME AS A300	EA		REF									3-6	1A1A1R20
X2	D									E	A469 SWITCH SECTION, ROTARY: 14304; 162-0283	EA		1									3-6	1A1A1S1A

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
X2	D		5940-660-3759							E	A470 TERMINAL, STUD: SAME AS A430	EA		9										
X2	D		5940-660-3759							E	A471 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	D		5940-660-3759							E	A472 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	D		5940-660-3759							E	A473 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A1E99
X2	D		5940-660-3759							E	A474 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A1E100
X2	D		5940-660-3759							E	A475 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A1E102
X2	D		5940-660-3759							E	A476 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A1E104
X2	D		5940-660-3759							E	A477 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A1E106
X2	D		5940-660-3759							E	A478 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A1E108
P	D		5820-135-0388							D	A479 AMPLIFIER SUBASSEMBLY: 14304; 162-0207	EA		1							27	3	3-6	1A1A2
X2	D									*	A480 NUT, CONE SEAT, HEXAGON: 14304; H4181	EA		4									6-11	91
X2	D									E	A481 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A456	EA		1									3-6	1A1A2C5
X2	D									E	A482 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A453	EA		1									3-6	1A1A2C14
X2	D		5910-952-1708							E	A483 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A454	EA		1									3-6	1A1A2C15
X2	D		5910-825-4340							E	A484 CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM15F101G	EA		1									3-6	1A1A2C17
X2	D		5910-069-2045							E	A485 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A455	EA		1									3-6	1A1A2C19
X2	D		5910-779-3456							E	A486 CAPACITOR, VARIALBE, CERAMIC DIELECTRIC: SAME AS A461	EA		3									3-6	1A1A2C13
X2	D		5910-779-3456							E	A487 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS A461	EA		REF									3-6	1A1A2C16
X2	D		5910-779-3456							E	A488 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS A461	EA		REF									3-6	1A1A2C18

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D									E	A489	CRYSTAL UNIT, QUARTZ: 14304; 162-0194	EA		1									3-6	1A1A2Y3
X2	D									E	A490	CRYSTAL UNIT, QUARTZ: 14304; 162-0195	EA		1									3-6	1A1A2Y4
X2	D									E	A491	PRINTED WIRING BOARD: 14304; 162-0204	EA		1										1A1A2MP1
X2	D		5905-299-1971							E	A492	RESISTOR, FIXED, COMPOSITION: SAME AS A300	EA		2									3-6	1A1A2R21
X2	D		5905-299-1971							E	A493	RESISTOR, FIXED, COMPOSITION: SAME AS A300	EA		REF									3-6	1A1A2R22
X2	D									E	A494	SWITCH SECTION, ROTARY: SAME AS A469	EA		1									3-6	1A1A2S1B
X2	D		5940-660-3759							E	A495	TERMINAL, STUD: SAME AS A430	EA		9										
X2	D		5940-660-3759							E	A496	TERMINAL, STUD: SAME AS A430	EA		REF										
X2	D		5940-660-3759							E	A497	TERMINAL, STUD: SAME AS A430	EA		REF										
X2	D		5940-660-3759							E	A498	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A2E103
X2	D		5940-660-3759							E	A499	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A2E105
X2	D		5940-660-3759							E	A500	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A2E107
X2	D		5940-660-3759							E	A501	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A2E109
X2	D		5940-660-3759							E	A502	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A2E114
X2	D		5940-660-3759							E	A503	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A2E115
P	D		5820-135-0387							D	A504	AMPLIFIER SUBASSEMBLY: 14304; 162-0208	EA		1							27	3	3-6	1A1A3
X2	D									*	A505	SCREW, TAPPING, THREAD CUTTING: SAME AS A452	EA		1									6-11	96
X2	D									E	A506	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A453	EA		1									3-6	1A1A3C21
X2	D		5910-952-1708							E	A507	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A454	EA		1									3-6	1A1A3C22

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D		5910-723-5272							E	A508 CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM15E360G	EA		1									3-6	1A1A3C24
X2	D		5910-069-2045							E	A509 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A455	EA		1									3-6	1A1A3C26
X2	D									E	A510 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A456	EA		1									3-6	1A1A3C27
X2	D		5910-779-3456							E	A511 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS A461	EA		3									3-6	1A1A3C20
X2	D		5910-779-3456							E	A512 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS A461	EA		REF									3-6	1A1A3C23
X2	D		5910-779-3456							E	A513 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS A461	EA		REF									3-6	1A1A3C25
X2	D									E	A514 PRINTED WIRING BOARD: 14304; 162-0205	EA		1										1A1A3MP1
X2	D		5905-299-1971							E	A515 RESISTOR, FIXED, COMPOSITION: SAME AS A300	EA		2									3-6	1A1A3R23
X2	D		5905-299-1971							E	A516 RESISTOR, FIXED, COMPOSITION: SAME AS A300	EA		REF									3-6	1A1A3R24
X2	D		5905-195-6453							E	A517 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF562J	EA		1									3-6	1A1A3R29
X2	D									E	A518 SWITCH SECTION, ROTARY: SAME AS A469	EA		1									3-6	1A1A3S1C
X2	D		5940-660-3759							E	A519 TERMINAL, STUD: SAME AS A430	EA		9										
X2	D		5940-660-3759							E	A520 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	D		5940-660-3759							E	A521 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	D		5940-660-3759							E	A522 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	D		5940-660-3759							E	A523 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	D		5940-660-3759							E	A524 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	D		5940-660-3759							E	A525 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A3E121
X2	D		5940-660-3759							E	A526 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A3E122

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D		5940-660-3759							E	A527 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A3E123
P	D		5820-135-0386							D	A528 AMPLIFIER SUBASSEMBLY: 14304; 162-0209	EA		1							27	3	3-6	1A1A4
X2	D									*	A529 NUT, CONE SEAT, HEXAGON: SAME AS A480	EA		4									6-11	94
X2	D									E	A530 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A453	EA		1									3-6	1A1A4C29
X2	D		5910-952-1708							E	A531 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A454	EA		1									3-6	1A1A4C30
X2	D		5910-841-3131							E	A532 CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM15E430G	EA		1									3-6	1A1A4C32
X2	D		5910-069-2045							E	A533 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A455	EA		1									3-6	1A1A4C34
X2	D									E	A534 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A456	EA		1									3-6	1A1A4C35
X2	D		5910-779-3456							E	A535 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS A461	EA		3									3-6	1A1A4C28
X2	D		5910-779-3456							E	A536 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS A461	EA		REF									3-6	1A1A4C31
X2	D		5910-779-3456							E	A537 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS A461	EA		REF									3-6	1A1A4C33
X2	D									E	A538 PRINTED WIRING BOARD: 14304; 162-0212	EA		1										1A1A4MP1
X2	D		5905-299-1971							E	A539 RESISTOR, FIXED, COMPOSITION: SAME AS A300	EA		2									3-6	1A1A4R25
X2	D		5905-299-1971							E	A540 RESISTOR, FIXED, COMPOSITION: SAME AS A300	EA		REF									3-6	1A1A4R26
X2	D									E	A541 SWITCH SECTION, ROTARY: SAME AS A469	EA		1									3-6	1A1A4S1D
X2	D		5940-660-3759							E	A542 TERMINAL, STUD: SAME AS A430	EA		9										
X2	D		5940-660-3759							E	A543 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	D		5940-660-3759							E	A544 TERMINAL, STUD: SAME AS A430	EA		REF										

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
X2	D		5940-660-3759							E	A545	TERMINAL, STUD: SAME AS A430	EA		REF									
X2	D		5940-660-3759							E	A546	TERMINAL, STUD: SAME AS A430	EA		REF									
X2	D		5940-660-3759							E	A547	TERMINAL, STUD: SAME AS A430	EA		REF									
X2	D		5940-660-3759							E	A548	TERMINAL, STUD: SAME AS A430	EA		REF								3-6	1A1A4E128
X2	D		5940-660-3759							E	A549	TERMINAL, STUD: SAME AS A430	EA		REF								3-6	1A1A4E129
X2	D		5940-660-3759							E	A550	TERMINAL, STUD: SAME AS A430	EA		REF								3-6	1A1A4E130
P	D		5820-135-4575							D	A551	AMPLIFIER SUBASSEMBLY: 14304; 162-0250	EA		1							27	3	3-6	1A1A5
X2	D		5305-984-4984							*	A552	SCREW, MACHINE: SAME AS A065	EA		4									6-11	66
X2	D		5310-515-7997							*	A553	WASHER, LOCK: SAME AS A054	EA		4									6-11	67
X2	D									E	A554	CABLE, RADIO FREQUENCY: 80058; RG178BU	FT		1										1A1A5W1
X2	D									E	A555	CABLE, RADIO FREQUENCY: 14304; W0006	FT		1										1A1A5W2
X2	D									E	A556	CAN: 14304; 162-0286	EA		4									6-11	107
X2	D		5310-063-8761							*	A557	NUT, PLAIN, HEXAGON: SAME AS A296	EA		1									6-11	103
X2	D									*	A558	NUT, PLAIN, HEXAGON: SAME AS A194	EA		1									6-11	105
X2	D		5310-515-7999							*	A559	WASHER, LOCK: SAME AS A042	EA		2									6-11	104
X2	D									E	A560	CAN: SAME AS A556	EA		REF									6-11	107
X2	D		5310-063-8761							*	A561	NUT, PLAIN, HEXAGON: SAME AS A296	EA		1									6-11	103
X2	D									*	A562	NUT, PLAIN, HEXAGON: SAME AS A194	EA		1									6-11	105
X2	D		5310-515-7999							*	A563	WASHER, LOCK: SAME AS A042	EA		2									6-11	104
X2	D									E	A564	CAN: SAME AS A556	EA		REF									6-11	107
X2	D		5310-063-8761							*	A565	NUT, PLAIN, HEXAGON: SAME AS A296	EA		1									6-11	103
X2	D									*	A566	NUT, PLAIN, HEXAGON: SAME AS A194	EA		1									6-11	105
X2	D		5310-515-7999							*	A567	WASHER, LOCK: SAME AS A042	EA		2									6-11	104

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D									E	A568 CAN: SAME AS A556	EA		REF									6-11	107
X2	D		5310-063-8761							*	A569 NUT, PLAIN, HEXAGON: SAME AS A296	EA		1									6-11	103
X2	D									*	A570 NUT, PLAIN, HEXAGON: SAME AS A194	EA		1									6-11	105
X2	D		5310-515-7999							*	A571 WASHER, LOCK: SAME AS A042	EA		2									6-11	104
X2	D									E	A572 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD19F102J500	EA		2									3-6	1A1A5C41
X2	D									E	A573 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A572	EA		REF									3-6	1A1A5C61
X2	D									E	A574 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: 72982; 503-001-62F	EA		4									3-6	1A1A5C36
X2	D									E	A575 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS A574	EA		REF									3-6	1A1A5C37
X2	D									E	A576 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS A574	EA		REF									3-6	1A1A5C38
X2	D									E	A577 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS A574	EA		REF									3-6	1A1A5C40
X2	D									E	A578 PRINTED WIRING BOARD: 14304; 162-0256	EA		1										1A1A5MP5
X2	D		5905-681-6462							E	A579 RESISTOR, FIXED, COMPOSITION: SAME AS A412	EA		1									3-6	1A1A5R1
X2	D		5905-802-6730							E	A580 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF470J	EA		1									3-6	1A1A5R2
X2	D									E	A581 TERMINAL, LUG: 73734; 1952	EA		4									6-11	1A1A5MP6
X2	D									*	A582 NUT, ASSEMBLED WASHER: 73734; 71500	EA		1									6-11	1A1A5MP6H1
X2	D		5305-889-3116							*	A583 SCREW, MACHINE: SAME AS A041	EA		1									6-11	1A1A5MP6H1
X2	D									E	A584 TERMINAL, LUG: SAME AS A581	EA		REF									6-11	1A1A5MP7
X2	D									*	A585 NUT, ASSEMBLED WASHER: SAME AS A582	EA		1									6-11	1A1A5MP7H1
X2	D		5305-889-3116							*	A586 SCREW, MACHINE: SAME AS A041	EA		1									6-11	1A1A5MP7H1
X2	D									E	A587 TERMINAL, LUG: SAME AS A581	EA		REF									6-11	1A1A5MP8

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D									*	A588	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1									6-11	1A1A5MP8H1
X2	D		5305-889-3116							*	A589	SCREW, MACHINE: SAME AS A041	EA		1									6-11	1A1A5MP8H1
X2	D									E	A590	TERMINAL, LUG: SAME AS A581	EA		REF									6-11	1A1A5MP9
X2	D									*	A591	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1									6-11	1A1A5MP9H1
X2	D		5305-889-3116							*	A592	SCREW, MACHINE: SAME AS A041	EA		1									6-11	1A1A5MP9H1
X2	D		5940-660-3759							E	A593	TERMINAL, STUD: SAME AS A430	EA		23										
X2	D		5940-660-3759							E	A594	TERMINAL, STUD: SAME AS A430	EA		REF										
X2	D		5940-660-3759							E	A595	TERMINAL, STUD: SAME AS A430	EA		REF										
X2	D		5940-660-3759							E	A596	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E124
X2	D		5940-660-3759							E	A597	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E127
X2	D		5940-660-3759							E	A598	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E134
X2	D		5940-660-3759							E	A599	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E138
X2	D		5940-660-3759							E	A600	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E142
X2	D		5940-660-3759							E	A601	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E146
X2	D		5940-660-3759							E	A602	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E147
X2	D		5940-660-3759							E	A603	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E148
X2	D		5940-660-3759							E	A604	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E170
X2	D		5940-660-3759							E	A605	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E171
X2	D		5940-660-3759							E	A606	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E172
X2	D		5940-660-3759							E	A607	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E173
X2	D		5940-660-3759							E	A608	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E174
X2	D		5940-660-3759							E	A609	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E175
X2	D		5940-660-3759							E	A610	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E176
X2	D		5940-660-3759							E	A611	TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A5E177

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION			UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1 - 20	DS (B) 21-50	DS (C) 51-100	GS (A) 1 - 20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D		5940-660-3759							E	A612	TERMINAL, STUD: SAME AS A430		EA		REF									3-6	1A1A5E178
X2	D		5940-660-3759							E	A613	TERMINAL, STUD: SAME AS A430		EA		REF									3-6	1A1A5E179
X2	D		5940-660-3759							E	A614	TERMINAL, STUD: SAME AS A430		EA		REF									3-6	1A1A5E180
X2	D		5940-660-3759							E	A615	TERMINAL, STUD: SAME AS A430		EA		REF									3-6	1A1A5E181
X2	D									E	A616	TRANSFORMER, RADIO FREQUENCY: 14304; 162-0276		EA		2									3-6	1A1A5L1
X2	D									E	A617	TRANSFORMER, RADIO FREQUENCY: 14304; 162-0278		EA		2									3-6	1A1A5L2
X2	D									E	A618	TRANSFORMER, RADIO FREQUENCY: SAME AS A616		EA		REF									3-6	1A1A5L3
X2	D									E	A619	TRANSFORMER, RADIO FREQUENCY: SAME AS A617		EA		REF									3-6	1A1A5L4
P	D		5820-135-4572							D	A620	AMPLIFIER SUBASSEMBLY: 14304; 162-0260		EA		1							53	3	3-6	1A1A6
X2	D		5305-889-3116							*	A621	SCREW, MACHINE: SAME AS A041		EA		4									6-11	2
X2	D									*	A622	SCREW, MACHINE: 14304; H0610		EA		1									6-11	5
X2	D									*	A623	WASHER, FLAT: 14304; H0286		EA		4									6-11	4
X2	D		5310-515-7999							*	A624	WASHER, LOCK: SAME AS A042		EA		4									6-11	3
X2	D									*	A625	WASHER, NONMETALLIC: 73734; 103900		EA		1									6-11	6
X2	D									E	A626	BEAD, FERRITE: 02114; 5659065-4B		EA		1										
M	D									E	A627	GUIDE, POWER SUPPLY: 91662; 5201-4012		EA		1										
M	D									E	A628	GUIDE, POWER SUPPLY: 91662; 5201-4022		EA		1										
X2	D									E	A629	CABLE ASSEMBLY, RADIO FREQUENCY: 14304; 162-0321		EA		1									3-4	1A1A6W1
X2	D									F	A630	CABLE, RADIO FREQUENCY: SAME AS A554		FT		1									3-4	1A1A6W1W1

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	(3) MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
X2	D									F	A631 CONNECTOR, PLUG, ELECTRICAL 16733; 1306-196	EA		1									3-4	1A1A6W1P30
X2	D									E	A632 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; IDO-001	EA		2									3-6	1A1A6C42
X2	D		5910-683-3008							E	A633 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; DDM103	EA		4									3-6	1A1A6C43
X2	D		5910-683-3008							E	A634 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A633	EA		REF									3-6	1A1A6C44
X2	D		5910-270-9083							E	A635 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; IDO-01	EA		4									3-6	1A1A6C45
X2	D		5910-683-3008							E	A636 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A633	EA		REF									3-6	1A1A6C46
X2	D		5910-270-9083							E	A637 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A635	EA		REF									3-6	1A1A6C48
X2	D									E	A638 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A632	EA		REF									3-6	1A1A6C49
X2	D		5910-270-9083							E	A639 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A635	EA		REF									3-6	1A1A6C54
X2	D		5910-270-9083							E	A640 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A635	EA		REF									3-6	1A1A6C56
X2	D		5910-683-3008							E	A641 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A633	EA		REF									3-6	1A1A6C57
X2	D									E	A642 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A572	EA		1									3-6	1A1A6C47
X2	D									E	A643 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15F820J500	EA		1									3-6	1A1A6C50
X2	D									E	A644 CAPACITOR, FIXED, MICA DIELECTRIC: 72982; 656-003	EA		1									3-6	1A1A6C52
X2	D									E	A645 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15E430J500	EA		1									3-6	1A1A6C53
X2	D									E	A646 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS A574	EA		1									3-6	1A1A6C51

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D									E	A647 CLAMP, LOOP: 95987; 1-16-2NA	EA		1									6-11	65
X2	D									*	A648 NUT, PLAIN, HEXAGON: 73734; 8000	EA		1									6-11	
X2	D		5305-928-2690							*	A649 SCREW, MACHINE: 96906; MS35206-204	EA		1									6-11	62
X2	D									*	A650 WASHER, FLAT: 14304; H0285	EA		1									6-11	64
X2	D		5310-928-2690							*	A651 WASHER, LOCK: 96906; MS35338-134	EA		1									6-11	63
X2	D									E	A652 CONTACT ASSEMBLY, ELECTRICAL: 91662; 02-005-113-6200	EA		1									3-6	1A1A6J31
X2	D									E	A653 MOUNTING PAD, TRANSISTOR: 07047; A10103DAP	EA		1										1A1A6MP5
X2	D									E	A654 PRINTED WIRING BOARD: 14304; 162-0266	EA		1										1A1A6MP6
X2	D		5905-192-0667							E	A655 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF224J	EA		1									3-6	1A1A6R3
X2	D		5905-185-8510							E	A656 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		1									3-6	1A1A6R4
X2	D		5905-279-1876							E	A657 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF222J	EA		1									3-6	1A1A6R5
X2	D		5905-279-3513							E	A658 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF221J	EA		1									3-6	1A1A6R6
X2	D		5905-279-3504							E	A659 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF472J	EA		1									3-6	1A1A6R7
X2	D		5905-171-1998							E	A660 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF333J	EA		1									3-6	1A1A6R8
X2	D		5905-249-3661							E	A661 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF683J	EA		1									3-6	1A1A6R9
X2	D		5905-190-8889							E	A662 RESISTOR, FIXED, COMPOSITION: SAME AS A304	EA		2									3-6	1A1A6R10
X2	D		5905-195-6806							E	A663 RESISTOR, FIXED, COMPOSITION: SAME AS A307	EA		1									3-6	1A1A6R13
X2	D		5905-195-6761							E	A664 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF104J	EA		1									3-6	1A1A6R14

(1) SOURCE CD	(1) MAINT. CD	(1) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND. CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR ALW. PER 100 EQUIP CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D		5905-190-8879							E	A665 RESISTOR, FIXED, COMPOSITION: SAME AS A304	EA		REF									3-6	1A1A6R15
X2	D		5905-190-8881							E	A666 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF182J	EA		1									3-6	1A1A6R17
X2	D									E	A667 RESISTOR, FIXED, WIREWOUND: 02985; TS5W123J	EA		1									3-6	1A1A6R11
X2	D									E	A668 RESISTOR, FIXED, WIREWOUND: 02985; TS2W332J	EA		1									3-6	1A1A6R12
X2	D									E	A669 RESISTOR, FIXED, WIREWOUND: 02985; TS2W471J	EA		1									3-6	1A1A6R13
X2	D		5905-903-0772							E	A670 RESISTOR, VARIABLE: SAME AS A422	EA		1									3-6	1A1A6R31
X2	D		5961-556-2091							E	A671 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		1									3-6	1A1A6CR1
X2	D		5961-752-0179							E	A672 SEMICONDUCTOR DEVICE, DIODE: 80131; IN753A	EA		1									3-6	1A1A6CR2
X2	D		5935-941-8991							E	A673 SOCKET, ELECTRON TUBE: 91662; 04-965-01	EA		1									3-6	1A1A6XV1
X2	D		5935-941-8990							E	A674 SOCKET, ELECTRON TUBE: 91662; 04-765-01	EA		1									3-6	1A1A6XV2
X2	D		5940-660-3759							E	A675 TERMINAL, STUD: SAME AS A430	EA		7									3-6	1A1A6E55
X2	D		5940-660-3759							E	A676 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A6E56
X2	D		5940-660-3759							E	A677 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A6E57
X2	D		5940-660-3759							E	A678 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A6E58
X2	D		5940-660-3759							E	A679 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A6E59
X2	D		5940-660-3759							E	A680 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A6E60
X2	D		5940-660-3759							E	A681 TERMINAL, STUD: SAME AS A430	EA		REF									3-6	1A1A6E62
X2	D		5961-901-4862							E	A682 TRANSISTOR: SAME AS A312	EA		1									3-6	Q1
X2	D									D	A683 BEARING, SLEEVE: 14304; 162-0237	EA		4									6-11	50
X2	D		5305-531-0137							*	A684 SETSCREW: SAME AS A170	EA		2									6-11	49

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	(3) MODEL 1	2	3	4	5	6	IND CD	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D									D	A685 BEARING, SLEEVE: SAME AS A683	EA		REF									6-11	50
X2	D		5305-531-0137							*	A686 SETSCREW: SAME AS A170	EA		2									6-11	49
X2	D									D	A687 BEARING, SLEEVE: SAME AS A683	EA		REF									6-11	56
X2	D		5305-889-3118							*	A688 SCREW, MACHINE: 96906; MS35206-203	EA		1									6-11	43
X2	D		5305-531-0137							*	A689 SETSCREW: SAME AS A170	EA		2									6-11	55
X2	D									D	A690 BEARING, SLEEVE: SAME AS A683	EA		REF									6-11	56
X2	D		5305-889-3118							*	A691 SCREW, MACHINE: SAME AS A688	EA		1									6-11	37
X2	D		5305-531-0137							*	A692 SETSCREW: SAME AS A170	EA		2									6-11	55
P	D		3030-241-5053							D	A693 BELT, FLAT: 14304; 162-0239	EA		2							10	90	6-11	42
X2	D									*	A694 NUT, PLAIN, HEXAGON: SAME AS A648	EA		1									6-11	39
X2	D		5305-889-3118							*	A695 SCREW, MACHINE: SAME AS A688	EA		1									6-11	41
X2	D		5310-928-2690							*	A696 WASHER, LOCK: SAME AS A651	EA		1									6-11	40
P	D		3030-241-5053							D	A697 BELT, FLAT: SAME AS A693	EA		REF									6-11	48
X2	D									*	A698 NUT, PLAIN, HEXAGON: SAME AS A648	EA		1									6-11	45
X2	D		5305-889-3118							*	A699 SCREW, MACHINE: SAME AS A688	EA		1									6-11	47
X2	D		5310-928-2690							*	A700 WASHER, LOCK: SAME AS A651	EA		1									6-11	46
M	D									D	A701 BRACKET, DOUBLE ANGLE: 14304; 162-0230	EA		1									6-11	58
M	D									D	A702 BRACKET, DOUBLE ANGLE: 14304; 162-0232	EA		1									6-11	35
X2	D		5305-889-3116							*	A703 SCREW, MACHINE: SAME AS A041	EA		5									6-11	31
X2	D		5305-889-2997							*	A704 SCREW, MACHINE: SAME AS A297	EA		1									6-11	31
X2	D		5310-782-1349							*	A705 WASHER, FLAT: SAME AS A111	EA		1									6-11	32
X2	D		5310-515-7999							*	A706 WASHER, LOCK: SAME AS A042	EA		6									6-11	32
M	D									D	A707 BRACKET, DOUBLE ANGLE: 14304; 162-0234	EA		3									6-11	80

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D		5305-889-3116							*	A708	SCREW, MACHINE: SAME AS A041	EA		3									6-11	78
X2	D		5310-515-7999							*	A709	WASHER, LOCK: SAME AS A042	EA		3									6-11	79
M	D									D	A710	BRACKET, DOUBLE ANGLE: SAME AS A707	EA		REF									6-11	85
X2	D		5305-889-3116							*	A711	SCREW, MACHINE: SAME AS A041	EA		3									6-11	83
X2	D		5310-515-7999							*	A712	WASHER, LOCK: SAME AS A042	EA		3									6-11	84
M	D									D	A713	BRACKET, DOUBLE ANGLE: SAME AS A707	EA		REF									6-11	88
X2	D		5305-889-3116							*	A714	SCREW, MACHINE: SAME AS A041	EA		3									6-11	86
X2	D		5310-515-7999							*	A715	WASHER, LOCK: SAME AS A042	EA		3									6-11	87
P	D		5995-251-2611							D	A716	CABLE ASSEMBLY, RADIO FREQUENCY: 14304; 162-0320	EA		1							8	13	6-11	1A1W1
X1										E	A717	CONNECTOR, PLUG, ELECTRICAL: 16733; 1303-196	EA		1									6-11	30
P	D		5910-401-6254							D	A718	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		2									6-11	16
P	D		5910-401-6254							D	A719	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									6-11	13
P	D		5910-992-5020							D	A720	CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15E750J500	EA		1							46	60	6-11	24
P	D		5910-900-3424							D	A721	CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15E390J500	EA		1							8	6	6-11	
M	D									D	A722	CHASSIS, ELECTRICAL EQUIPMENT: 14304; 162-0226	EA		1									6-11	1
P	D		5950-060-9188							D	A723	COIL, RADIO FREQUENCY: SAME AS A363	EA		1									6-11	18
X2	D		5340-619-0188							D	A724	CLAMP, LOOP: SAME AS A088	EA		1									6-11	65
X2	D									D	A725	CLIP, SPRING TENSION: 14304; 162-0246	EA		2									6-11	38
X2	D									D	A726	CLIP, SPRING TENSION: SAME AS A725	EA		REF									6-11	44
X2	D		5820-986-7716							D	A727	CORE, ADJUSTABLE TUNING: 14304; 162-0284	EA		4									6-11	60

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D		5820-986-7716							D	A728	CORE, ADJUSTABLE TUNING: SAME AS A727	EA		REF								6-11	60
X2	D		5820-986-7716							D	A729	CORE, ADJUSTABLE TUNING: SAME AS A727	EA		REF								6-11	60
X2	D		5820-986-7716							D	A730	CORE, ADJUSTABLE TUNING: SAME AS A727	EA		REF								6-11	60
X2	D									D	A731	COUPLING, SHAFT, RIGID: SAME AS A101	EA		3								6-11	54
X2	D		5305-531-0137							*	A732	SETSCREW: SAME AS A170	EA		2								6-11	53
X2	D									D	A733	COUPLING, SHAFT, RIGID: SAME AS A101	EA		REF								6-11	75
X2	D		5305-531-0137							*	A734	SETSCREW: SAME AS A170	EA		2								6-11	74
X2	D									D	A735	COUPLING, SHAFT, RIGID: SAME AS A101	EA		REF								6-11	75
X2	D		5305-531-0137							*	A736	SETSCREW: SAME AS A170	EA		2								6-11	74
M	D									D	A737	COVER, AMPLIFIER: 14304; 162-0249	EA		1								6-11	35
X2	D		5305-993-0190							*	A738	SCREW, MACHINE: SAME AS A139	EA		6								6-11	31
X2	D		5305-984-4988							*	A739	SCREW, MACHINE: SAME AS A091	EA		2								6-11	33
X2	D		5310-515-7999							*	A740	WASHER, LOCK: SAME AS A042	EA		6								6-11	32
X2	D		5310-515-7997							*	A741	WASHER, LOCK: SAME AS A054	EA		2								6-11	34
P	O		5960-985-8987							D	A742	ELECTRON TUBE: 80131; 6DC6	EA		1	3	9	16	5	3	4	187	100	3-4	1A1V1
P	O		5960-052-8984							D	A743	ELECTRON TUBE: 80131; 12BY7A	EA		1	3	9	16	5	3	4	187	100	3-4	1A1V2
P	D									D	A744	RELAY, ARMATURE: 77342; KH4437	EA		1							19	36	6-11	17
X2	D		5310-969-6959							*	A745	NUT, ASSEMBLED WASHER: SAME AS A029	EA		1									6-11	25
P	D		5961-921-3781							D	A746	SEMICONDUCTOR DEVICE, DIODE: SAME AS A310	EA		1									6-11	21
X2	D									D	A747	SHAFT, STRAIGHT: 14304; 162-0227	EA		1									6-11	51
X2	D									D	A748	SHAFT, STRAIGHT: 14304; 162-0241	EA		1									6-11	36
X2	D									D	A749	SHAFT, STRAIGHT: 14304; H0196	EA		1									6-11	73
X2	D		5960-272-9094							D	A750	SHIELD, ELECTRON TUBE: 81349; TS102U02	EA		1									6-11	

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D		5960-519-9834							D	A751	SHIELD, ELECTRON TUBE: 81349; TS103U03	EA		1								6-11	1A1MP28
X2	D									D	A752	SPACER, SLEEVE: 14304; 162-0242	EA		2								6-11	59
X2	D									*	A753	SCREW, MACHINE: 14304; H0617	EA		1								6-11	118
X2	D									D	A754	SPACER, SLEEVE: SAME AS A752	EA		REF								6-11	59
X2	D									*	A755	SCREW, MACHINE: SAME AS A753	EA		1								6-11	118
X2	D									D	A756	SPACER, SLEEVE: 14304; H4704	EA		13								6-11	117
X2	D									*	A757	NUT, PLAIN, HEXAGON: SAME AS A194	EA		1								6-11	115
X2	D		5310-515-7999							*	A758	WASHER, LOCK: SAME AS A042	EA		1								6-11	116
X2	D									D	A759	SPACER, SLEEVE: SAME AS A756	EA		REF								6-11	117
X2	D									*	A760	NUT, PLAIN, HEXAGON: SAME AS A194	EA		1								6-11	115
X2	D		5310-515-7999							*	A761	WASHER, LOCK: SAME AS A042	EA		1								6-11	116
X2	D									D	A762	SPACER, SLEEVE: SAME AS A756	EA		REF								6-11	117
X2	D									*	A763	NUT, PLAIN, HEXAGON: SAME AS A194	EA		1								6-11	115
X2	D		5310-515-7999							*	A764	WASHER, LOCK: SAME AS A042	EA		1								6-11	116
X2	D									D	A765	SPACER, SLEEVE: SAME AS A756	EA		REF								6-11	117
X2	D									*	A766	NUT, PLAIN, HEXAGON: SAME AS A194	EA		1								6-11	115
X2	D		5310-515-7999							*	A767	WASHER, LOCK: SAME AS A042	EA		1								6-11	116
X2	D									D	A768	SPACER, SLEEVE: SAME AS A756	EA		REF								6-11	117
X2	D									*	A769	NUT, PLAIN, HEXAGON: SAME AS A194	EA		1								6-11	115
X2	D		5310-515-7999							*	A770	WASHER, LOCK: SAME AS A042	EA		1								6-11	116
X2	D									D	A771	SPACER, SLEEVE: SAME AS A756	EA		REF								6-11	92
X2	D									D	A772	SPACER, SLEEVE: SAME AS A756	EA		REF								6-11	92
X2	D									D	A773	SPACER, SLEEVE: SAME AS A756	EA		REF								6-11	92
X2	D									D	A774	SPACER, SLEEVE: SAME AS A756	EA		REF								6-11	92

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D									D	A775 SPACER, SLEEVE: SAME AS A756	EA		REF									6-11	95
X2	D									D	A776 SPACER, SLEEVE: SAME AS A756	EA		REF									6-11	95
X2	D									D	A777 SPACER, SLEEVE: SAME AS A756	EA		REF									6-11	95
X2	D									D	A778 SPACER, SLEEVE: SAME AS A756	EA		REF									6-11	95
X2	D									D	A779 SPACER, SLEEVE: 14304; H4651	EA		4									6-11	114
X2	D		5305-984-4988							*	A780 SCREW, MACHINE: SAME AS A091	EA		1									6-11	112
X2	D		5310-515-7997							*	A781 WASHER, LOCK: SAME AS A054	EA		1									6-11	113
X2	D									D	A782 SPACER, SLEEVE: SAME AS A779	EA		REF									6-11	114
X2	D		5305-984-4988							*	A783 SCREW, MACHINE: SAME AS A091	EA		1									6-11	112
X2	D		5310-515-7997							*	A784 WASHER, LOCK: SAME AS A054	EA		1									6-11	113
X2	D									D	A785 SPACER, SLEEVE: SAME AS A779	EA		REF									6-11	114
X2	D		5305-984-4988							*	A786 SCREW, MACHINE: SAME AS A091	EA		1									6-11	112
X2	D		5310-515-7997							*	A787 WASHER, LOCK: SAME AS A054	EA		1									6-11	113
X2	D									D	A788 SPACER, SLEEVE: SAME AS A779	EA		REF									6-11	114
X2	D		5305-984-4988							*	A789 SCREW, MACHINE: SAME AS A091	EA		1									6-11	112
X2	D		5310-515-7997							*	A790 WASHER, LOCK: SAME AS A054	EA		1									6-11	113
X2	D									D	A791 SPACER, SLEEVE: 14304; H4701	EA		8									6-11	97
X2	D									D	A792 SPACER, SLEEVE: SAME AS A791	EA		REF									6-11	97
X2	D									D	A793 SPACER, SLEEVE: SAME AS A791	EA		REF									6-11	97
X2	D									D	A794 SPACER, SLEEVE: SAME AS A791	EA		REF									6-11	97
X2	D									D	A795 SPACER, SLEEVE: SAME AS A791	EA		REF									6-11	98
X2	D									D	A796 SPACER, SLEEVE: SAME AS A791	EA		REF									6-11	98
X2	D									D	A797 SPACER, SLEEVE: SAME AS A791	EA		REF									6-11	98
X2	D									D	A798 SPACER, SLEEVE: SAME AS A791	EA		REF									6-11	98

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D									D	A799	TERMINAL, FEEDTHRU, INSULATED: 17117; 2308-91-5	EA		1									6-11	14
X2	D		5305-993-0190							*	A800	SCREW, MACHINE: SAME AS A139	EA		1									6-11	19
X2	D		5310-515-7999							*	A801	WASHER, LOCK: SAME AS A042	EA		1									6-11	20
X2	D									D	A802	TERMINAL, LUG: SAME AS A581	EA		11									6-11	15
X2	D		5310-063-8761							*	A803	NUT, PLAIN, HEXAGON: SAME AS A296	EA		1									6-11	25
X2	D		5305-889-3116							*	A804	SCREW, MACHINE: SAME AS A041	EA		1									6-11	24
X2	D		5310-515-7999							*	A805	WASHER, LOCK: SAME AS A042	EA		1									6-11	26
X2	D									D	A806	TERMINAL, LUG: SAME AS A581	EA		REF									6-11	8
X2	D		5310-063-8761							*	A807	NUT, PLAIN, HEXAGON: SAME AS A296	EA		1									6-11	10
X2	D		5305-889-3116							*	A808	SCREW, MACHINE: SAME AS A041	EA		1									6-11	12
X2	D		5310-515-7999							*	A809	WASHER, LOCK: SAME AS A042	EA		1									6-11	11
X2	D									D	A810	TERMINAL, LUG: SAME AS A581	EA		REF									6-11	8
X2	D		5310-063-8761							*	A811	NUT, PLAIN, HEXAGON: SAME AS A296	EA		1									6-11	10
X2	D		5305-889-3116							*	A812	SCREW, MACHINE: SAME AS A041	EA		1									6-11	12
X2	D		5310-515-7999							*	A813	WASHER, LOCK: SAME AS A042	EA		1									6-11	11
X2	D									D	A814	TERMINAL, LUG: SAME AS A581	EA		REF									6-11	8
X2	D									*	A815	NUT, PLAIN, HEXAGON: SAME AS A194	EA		1									6-11	10
X2	D		5305-889-3116							*	A816	SCREW, MACHINE: SAME AS A041	EA		1									6-11	12
X2	D		5310-515-7999							*	A817	WASHER, LOCK: SAME AS A042	EA		1									6-11	11
X2	D									D	A818	TERMINAL, LUG: SAME AS A581	EA		REF									6-11	22
X2	D									*	A819	NUT, PLAIN HEXAGON: 73734; 8001	EA		1									6-11	23
X2	D									D	A820	TERMINAL, LUG: SAME AS A581	EA		REF									6-11	8
X2	D		5305-889-3116							*	A821	SCREW, MACHINE: SAME AS A041	EA		1									6-11	12
X2	D		5310-515-7999							*	A822	WASHER, LOCK: SAME AS A042	EA		1									6-11	11

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D									D	A823	TERMINAL, LUG: SAME AS A581	EA		REF									6-11	77
X2	D									D	A824	TERMINAL, LUG: SAME AS A581	EA		REF									6-11	77
X2	D									D	A825	TERMINAL, LUG: SAME AS A581	EA		REF									6-11	77
X2	D									D	A826	TERMINAL, LUG: SAME AS A581	EA		REF									6-11	77
X2	D									D	A827	TERMINAL, LUG: SAME AS A581	EA		REF									6-11	77
X2	D									D	A828	TERMINAL, LUG: SAME AS A236	EA		2									6-11	27
X2	D									D	A829	TERMINAL, LUG: SAME AS A236	EA		REF									6-11	27
X2	D									D	A830	WASHER, SPRING TENSION: 14304; 162-0147	EA		8									6-11	52,57
P	F		5820-191-9297							C	A831	AMPLIFIER-LIMITER: 14304; 162-0550	EA		1	*	2	2	2	2	2	27	3	3-20	1A5
X2	F									*	A832	NUT, ASSEMBLED WASHER:SAME AS A582	EA		4										
X2	F		5310-782-1349							*	A833	WASHER, FIAT: SAME AS A111	EA		4										
X2	D									D	A834	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A644	EA		1									3-20	1A5C1
X2	D		5910-107-0757							D	A835	CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; ID0-005	EA		1									3-20	1A5C3
X2	D		5910-934-2865							D	A836	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		1									3-20	1A5C2
X2	D		5950-581-8934							D	A837	COIL, RADIO FREQUENCY: 99800; 1537-02	EA		1									3-20	1A5L1
X2	D		5950-027-2761							D	A838	COIL, RADIO FREQUENCY: 99800; 1537-52	EA		1									3-20	1A5L2
X2	D									D	A839	PRINTED WIRING BOARD: 14304; 162-0551	EA		1									3-20	1A5MP1
X2	D									D	A840	RELAY, ARMATURE: 02289; 2BC4E113	EA		1									3-20	1A5K1
X2	D		5305-889-3118							*	A841	SCREW, MACHINE: SAME AS A688	EA		2									3-20	1A5H2
X2	D		5310-928-2690							*	A842	WASHER, LOCK: SAME AS A651	EA		2									3-20	1A5H2
X2	D		5905-185-8516							D	A843	RESISTOR, FIXED, COMPOSITION: 81349; RC42GF103J	EA		1									3-20	1A5R1

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D		5905-190-8881							D	A844 RESISTOR, FIXED, COMPOSITION: SAME AS A666	EA		1									3-20	1A5R2
X2	D		5905-190-8883							D	A845 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF100J	EA		1									3-20	1A5R3
X2	D		5905-279-3500							D	A846 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF183J	EA		1									3-20	1A5R4
X2	D		5961-814-0768							D	A847 SEMICONDUCTOR DEVICE, DIODE: 80131; 1N3064	EA		2									3-20	1A5CR1
X2	D		5961-814-0768							D	A848 SEMICONDUCTOR DEVICE, DIODE: SAME AS A847	EA		REF									3-20	1A5CR2
X2	D									D	A849 SPACER, SLEEVE: 06540; 9506BB0256-3A	EA		2									3-20	1A5MP2
X2	D									D	A850 SPACER, SLEEVE: SAME AS A849	EA		REF									3-20	1A5MP3
X2	D		5961-465-6555							D	A851 TRANSISTOR: SAME AS A311	EA		1									3-20	1A5Q1
P	F		5820-191-9296							C	A852 AMPLIFIER-LIMITER: 14304; 162-1500	EA		1	2	2	3	2	2	2	33	3	3-42	1A14
X2	F		5305-889-3116							*	A853 SCREW, MACHINE: SAME AS A041	EA		2									3-42	1A14H2
X2	F		5310-782-1349							*	A854 WASHER, FLAT: SAME AS A111	EA		2									3-42	1A14H2
X2	F		5310-515-7999							*	A855 WASHER, LOCK: SAME AS A042	EA		2									3-42	1A14H2
M	D									D	A856 BRACKET, DOUBLE ANGLE: 93713; SSOCH	EA		1									3-42	1A14MP1
X2	D									*	A857 NUT, PLAIN HEXAGON: SAME AS A194	EA		2									3-42	1A14H2
X2	D									*	A858 SCREW, MACHINE: 73734; 23022	EA		2									3-42	1A14H2
X2	D									*	A859 WASHER, FLAT: SAME AS A623	EA		2									3-42	1A14H2
X2	D		5310-933-8118							*	A860 WASHER, LOCK: 96906; MS35338-135	EA		2									3-42	1A14H2
X2	D									D	A861 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A632	EA		1									3-42	1A14C1
X2	D									D	A862 CAPACITOR, FIXED, ELECTROLYTIC: 05079; S33-20C3MI	EA		1									3-42	1A14C4
X2	D		5910-934-2865							D	A863 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		2									3-42	1A14C5

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D		5910-934-2865							D	A864 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-42	1A14C6
X2	D		5910-996-0666							D	A865 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A353	EA		1									3-42	1A14C7
X2	D									D	A866 CAPACITOR, FIXED, PLASTIC DIELECTRIC: 93790; DMF1P22	EA		1									3-42	1A14C2
X2	D									D	A867 CONTACT ASSEMBLY, ELECTRICAL: 91662; 02-005-111-5200	EA		1									3-42	1A14P24
X2	D									D	A868 PRINTED WIRING BOARD: 14304; 162-1506	EA		1									3-42	1A14MP2
X2	D		5905-171-1998							D	A869 RESISTOR, FIXED, COMPOSITION: SAME AS A660	EA		1									3-42	1A14R1
X2	D		5905-185-8510							D	A870 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		1									3-42	1A14R2
X2	D		5905-279-2522							D	A871 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF154J	EA		1									3-42	1A14R3
X2	D		5905-279-1880							D	A872 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF272J	EA		1									3-42	1A14R4
X2	D		5905-195-6453							D	A873 RESISTOR, FIXED, COMPOSITION: SAME AS A517	EA		1									3-42	1A14R5
X2	D		5905-279-1876							D	A874 RESISTOR, FIXED, COMPOSITION: SAME AS A657	EA		1									3-42	1A14R6
X2	D		5905-190-8889							D	A875 RESISTOR, FIXED, COMPOSITION: SAME AS A304	EA		1									3-42	1A14R7
X2	D		5905-192-3971							D	A876 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF331J	EA		1									3-42	1A14R8
X2	D		5961-921-3781							D	A877 SEMICONDUCTOR DEVICE, DIODE: SAME AS A310	EA		1									3-42	1A14CR1
X2	D									D	A878 TRANSFORMER AUDIO FREQUENCY: 93713; SSO-8	EA		1									3-42	1A14T1
X2	D		5961-901-4862							D	A879 TRANSISTOR: SAME AS A312	EA		1									3-42	1A14Q1
X2	D		[illegible]							D	A880 TRANSISTOR: SAME AS A447	EA		1									3-42	1A14Q2

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	F		5820-191-9295							C	A881 AMPLIFIER-LIMITER: 14304; 162-1600	EA		1	*	2	2	2	2	2	27	3	3-44	1A15
X2	F		5305-889-3116							*	A882 SCREW, MACHINE: SAME AS A041	EA		2									3-44	1A15H2
X2	F		5310-782-1349							*	A883 WASHER, FLAT: SAME AS A111	EA		2									3-44	1A15H2
X2	F		5310-515-7999							*	A884 WASHER, LOCK: SAME AS A042	EA		1									3-44	1A15H1
X2	D		5910-401-6254							D	A885 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		1									3-44	1A15C3
X2	D									D	A886 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A862	EA		1									3-44	1A15C1
X2	D		5910-996-0666							D	A887 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A353	EA		1									3-44	1A15C2
X2	D									D	A888 CONTACT ASSEMBLY, ELECTRICAL: SAME AS A867	EA		1									3-44	1A15P28
X2	D									D	A889 PRINTED WIRING BOARD: 14304; 162-1606	EA		1									3-44	1A15MP1
X2	D		5905-681-9969							D	A890 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		1									3-44	1A15R1
X2	D		5905-681-9970							D	A891 RESISTOR, FIXED, COMPOSITION: SAME AS A373	EA		1									3-44	1A15R2
X2	D		5905-725-6995							D	A892 RESISTOR, FIXED, COMPOSITION: SAME AS A401	EA		1									3-44	1A15R3
X2	D		5905-683-2243							D	A893 RESISTOR, FIXED, COMPOSITION: SAME AS A415	EA		1									3-44	1A15R4
X2	D		5905-681-8818							D	A894 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		1									3-44	1A15R5
X2	D		5905-686-9994							D	A895 RESISTOR, FIXED, COMPOSITION: SAME AS A390	EA		1									3-44	1A15R7
X2	D		5905-683-7723							D	A896 RESISTOR, FIXED, COMPOSITION: SAME AS A394	EA		1									3-44	1A15R8
X2	D		5905-723-5251							D	A897 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF222J	EA		1									3-44	1A15R9
X2	D		5905-903-0772							D	A898 RESISTOR, VARIABLE: SAME AS A422	EA		1									3-44	1A15R6

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D		5961-921-3781							D	A899	SEMICONDUCTOR DEVICE, DIODE: SAME AS A310	EA		1								3-44	1A15CR1
X2	D		5961-835-0683							D	A900	TRANSISTOR: 07263; 2N3565	EA		1								3-44	1A15Q1
X2	D		5961-842-6937							D	A901	TRANSISTOR: 16736; 2N706	EA		1								3-44	1A15Q2
M	D									C	A902	BRACKET, ANGLE: 73734; 129515	EA		10									
X2	F									*	A903	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1									
M	D									C	A904	BRACKET, ANGLE: SAME AS A902	EA		REF									
X2	F									*	A905	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1									
M	D									C	A906	BRACKET, ANGLE: SAME AS A902	EA		REF									
X2	F									*	A907	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1									
X2	F									*	A908	SCREW, MACHINE: SAME AS A622	EA		1									
M	D									C	A909	BRACKET, ANGLE: SAME AS A902	EA		REF									
X2	F									*	A910	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1									
X2	F									*	A911	SCREW, MACHINE: SAME AS A622	EA		1									
M	D									C	A912	BRACKET, ANGLE: SAME AS A902	EA		REF									
X2	F									*	A913	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1									
X2	F									*	A914	SCREW, MACHINE: SAME AS A047	EA		1									
M	D									C	A915	BRACKET, ANGLE: SAME AS A902	EA		REF									
X2	F									*	A916	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1									
X2	F									*	A917	SCREW, MACHINE: SAME AS A047	EA		1									
M	D									C	A918	BRACKET, ANGLE: SAME AS A902	EA		REF									
X2	F									*	A919	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1									
X2	F		5305-889-3116							*	A920	SCREW, MACHINE: SAME AS A041	EA		1									
X2	F		5310-515-7999							*	A921	WASHER, LOCK: SAME AS A042	EA		1									
M	D									C	A922	BRACKET, ANGLE: SAME AS A902	EA		REF									

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW PER 100 EQUIP CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									*	A923	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1										
X2	F		5305-889-3116							*	A924	SCREW, MACHINE: SAME AS A041	EA		1										
X2	F		5310-515-7999							*	A925	WASHER, LOCK: SAME AS A042	EA		1										
M	D									C	A926	BRACKET, ANGLE: SAME AS A902	EA		REF										
X2	F									*	A927	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1										
X2	F		5305-993-0190							*	A928	SCREW, MACHINE: SAME AS A139	EA		1										
M	D									C	A929	BRACKET, ANGLE: SAME AS A902	EA		REF										
X2	F									*	A930	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1										
X2	F		5305-993-0190							*	A931	SCREW, MACHINE: SAME AS A139	EA		1										
M	D									C	A932	BRACKET, ANGLE: 73734; 36-510	EA		2										
X2	F		5305-984-4984							*	A933	SCREW, MACHINE: SAME AS A065	EA		1										
X2	F		5310-515-7997							*	A934	WASHER, LOCK: SAME AS A054	EA		1										
M	D									C	A935	BRACKET, ANGLE: SAME AS A932	EA		REF										
X2	F		5305-984-4984							*	A936	SCREW, MACHINE: SAME AS A065	EA		1										
X2	F		5310-515-7997							*	A937	WASHER, LOCK: SAME AS A054	EA		1										
M	D									C	A938	BRACKET, ANGLE: 14304; 162-0608	EA		1										
X2	F		5305-889-3116							*	A939	SCREW, MACHINE: SAME AS A041	EA		2										
X2	F		5310-515-7999							*	A940	WASHER, LOCK: SAME AS A042	EA		2										
M	D									C	A941	BRACKET, ANGLE: 14304; 162-0101	EA		1										
X2	F		5305-993-0190							*	A942	SCREW, MACHINE: SAME AS A139	EA		2										
X2	F		5310-515-7999							*	A943	WASHER, LOCK: SAME AS A042	EA		2										
M	D									C	A944	BRACKET, ANGLE: 14304; 162-0104	EA		1										
X2	F		5305-993-0190							*	A945	SCREW, MACHINE: SAME AS A139	EA		2										
X2	F		5310-515-7999							*	A946	WASHER, LOCK: SAME AS A042	EA		2										

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1 - 20	DS (B) 21-50	DS (C) 51-100	GS (A) 1 - 20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
M	D									C	A947 BRACKET, ANGLE: 14304; 162-0370	EA		1										
X2	F									*	A948 SCREW, MACHINE: SAME AS A622	EA		2										
M	D									C	A949 BRACKET, DOUBLE ANGLE: 14304; 162-0121	EA		1										
X2	F		5310-969-6959							*	A950 NUT, ASSEMBLED WASHER: SAME AS A029	EA		3										
X2	F		5310-954-9965							*	A951 NUT, PLAIN, HEXAGON: 73734; 8005	EA		1										
X2	F		5305-984-4984							*	A952 SCREW, MACHINE: SAME AS A065	EA		4										
X2	F		5310-515-7997							*	A953 WASHER, LOCK: SAME AS A054	EA		1										
M	D									C	A954 BRACKET, DOUBLE ANGLE: 14304; 162-0168	EA		1										
X2	F									*	A955 SCREW, MACHINE: 14304; H0611	EA		1										
P	F		5995-245-1881							C	A956 CABLE ASSEMBLY, RADIO FREQUENCY: 14304; 162-0310	EA		1	*	*	2	*	*	2	8	13	3-10	1W1
X1										D	A957 CONNECTOR, PLUG, ELECTRICAL: SAME AS A631	EA		1									3-10	1W1P36
P	F		5995-245-1884							C	A958 CABLE ASSEMBLY, RADIO FREQUENCY: 14304; 162-0311	EA		1	*	*	2	*	*	2	8	13	3-10	1W2
X1										D	A959 CONNECTOR, PLUG, ELECTRICAL: SAME AS A631	EA		1									3-10	1W2P46
P	F		5995-245-1893							C	A960 CABLE ASSEMBLY, RADIO FREQUENCY: 14304; 162-0312	EA		1	*	*	2	*	*	2	8	13	3-10	1W3
X1										D	A961 CONNECTOR, PLUG, ELECTRICAL: SAME AS A631	EA		1									3-10	1W3P14
P	F		5995-245-1894							C	A962 CABLE ASSEMBLY, RADIO FREQUENCY: 14304; 162-0313	EA		1	*	*	2	*	*	2	8	13	3-10	1W4
X1										D	A963 CONNECTOR, PLUG, ELECTRICAL: SAME AS A631	EA		1									3-10	1W4P15
P	F		5995-251-2609							C	A964 CABLE ASSEMBLY, RADIO FREQUENCY: 14304; 162-0314	EA		1	*	*	2	*	*	2	8	13	3-16	1W5

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X1										D	A965 CONNECTOR, PLUG, ELECTRICAL: SAME AS A631	EA		1									3-16	1W5P9
P	F		5995-251-2610							C	A966 CABLE ASSEMBLY, RADIO FREQUENCY: 14304; 162-0317	EA		1	*	*	2	*	*	2	8	13	2-2	1W6
X1										D	A967 CONNECTOR, PLUG, ELECTRICAL: SAME AS A631	EA		2									2-2	1W6P22
X1										D	A968 CONNECTOR, PLUG, ELECTRICAL: SAME AS A631	EA		REF									2-2	1W6P25
P	F		5995-403-7075							C	A969 CABLE ASSEMBLY, RADIO FREQUENCY: 14304; 162-0318	EA		1	*	*	2	*	*	2	8	13	2-4	1W7
X1										D	A970 CONNECTOR, PLUG, ELECTRICAL: SAME AS A631	EA		2									2-4	1W7P11
X1										D	A971 CONNECTOR, PLUG, ELECTRICAL: SAME AS A631	EA		REF									2-4	1W7P46
P	F		5995-403-7076							C	A972 CABLE ASSEMBLY, RADIO FREQUENCY: 14304; 162-0322	EA		1	*	*	2	*	*	2	8	13	2-4	1W8
X1										D	A973 CONNECTOR, PLUG, ELECTRICAL: SAME AS A631	EA		1									2-4	1W8J43
P	F		5995-403-7077							C	A974 CABLE ASSEMBLY, RADIO FREQUENCY: 14304; 162-0323	EA		1	*	*	2	*	*	2	8	13	2-2	1W9
X1										D	A975 CONNECTOR, PLUG, ELECTRICAL: SAME AS A631	EA		2									2-2	1W9P17
X1										D	A976 CONNECTOR, PLUG, ELECTRICAL: SAME AS A631	EA		REF									2-2	1W9P24
P	F		5995-136-4982							C	A977 CABLE ASSEMBLY, RADIO FREQUENCY: 14304; 162-0315	EA		1	*	*	2	*	*	2	8	13	3-16	1W10
X1										D	A978 CONNECTOR, PLUG, ELECTRICAL: SAME AS A717	EA		1									3-16	1W10J46
M	D									C	A979 CAP, ELECTRICAL: 14304; 162-0186	EA		2										
M	D									C	A980 CAP, ELECTRICAL: SAME AS A979	EA		REF										
M	D									C	A981 CAP, PILLOW BLOCK: 14304; 162-0075	EA		1										

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
X2	F									*	A982 SCREW, MACHINE: 73734; 23426	EA		2										
X2	F									*	A983 WASHER, FLAT: SAME AS A623	EA		2										
X2	F		5310-515-7999							*	A984 WASHER, LOCK: SAME AS A042	EA		2										
P	F		5910-498-5722							C	A985 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 3878-010R2G0251J	EA		2	*	2	2	*	*	2	13	12	2-6	1C4
P	F		5910-498-5722							C	A986 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A985	EA		REF									2-6	1C7
P	F		5910-934-0327							C	A987 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 841-000Z5U0203M	EA		2	*	2	2	*	*	2	13	12		1C12
P	F		5910-934-0327							C	A988 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A987	EA		REF										1C13
P	F		5910-401-6254							C	A989 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 5815-000Y5U0104Z	EA		3	*	1	2	*	1	1	18	4		1C14
P	F		5910-843-9594							C	A990 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 91418; 2HV110	EA		2	*	2	2	*	*	2	13	12		1C15
P	F		5910-270-9083							C	A991 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; IDO-01	EA		4	2	2	3	2	2	2	33	36		1C16
P	F		5910-270-9083							C	A992 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A991	EA		REF										1C17
P	F		5910-270-9083							C	A993 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A991	EA		REF										1C18
P	F		5910-843-9594							C	A994 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A990	EA		REF										1C19
P	F		5910-498-5721							C	A995 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 3878-010C0G0680J	EA		1	*	*	2	*	*	2	8	6		1C20
P	F									C	A996 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 56289; 19C291	EA		1	*	*	2	*	*	2	8	6		1C21
P	F		5910-825-0403							C	A997 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; DDA104	EA		2	2	2	3	2	2	2	33	36		1C22
P	F		5910-577-1138							C	A998 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; DD103	EA		1	*	*	2	*	*	2	8	6	2-6	1C23

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1YR. ALW. PER 100 EQUIP CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	F		5910-694-6207							C	A999 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 3878-010C0G0390J	EA		1	*	*	2	*	*	2	8	6	2-6	1C24
P	F		5910-908-8316							C	B001 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 3878-010C0G0181J	EA		1	*	*	2	*	*	2	8	6	2-6	1C25
P	F		5910-825-0403							C	B002 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A997	EA		REF										1C26
P	F		5910-910-4099							C	B003 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 3878-010T2H0800J	EA		1	*	*	2	*	*	2	8	6		1C27
P	F		5910-910-4640							C	B004 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 3878-010C0G0121J	EA		2	*	2	2	*	2	2	13	12		1C28
P	F		5910-910-4640							C	B005 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B004	EA		REF										1C29
P	F		5910-910-4645							C	B006 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 3878-010B1G0201J	EA		1	*	*	2	*	*	2	8	6		1C30
P	F									C	B007 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 3878-010R2G0271J	EA		1	*	*	2	*	*	2	8	6		1C31
P	F		5910-910-2824							C	B008 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 3878-010P3K0561J	EA		2	*	2	2	*	2	2	13	12		1C32
P	F		5910-910-2824							C	B009 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B008	EA		REF										1C33
P	F		5910-910-4647							C	B010 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 3878-010R3A0681J	EA		3	*	2	2	*	2	2	18	18		1C34
P	F		5910-498-5724							C	B011 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 3878-010S3B0102J	EA		1	*	*	2	*	*	2	8	6		1C35
P	F		5910-910-4647							C	B012 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B010	EA		REF										1C36
P	F		5910-910-4647							C	B013 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B010	EA		REF										1C37
P	F		5910-683-3008							C	B014 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; DDM103	EA		5	2	2	3	2	2	2	33	42		1C39
P	F		5910-401-6254							C	B015 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A989	EA		REF										1C49

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	F		5910-401-6254							C	B016 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A989	EA		REF										1C50
P	F		5910-683-3008							C	B017 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B014	EA		REF										1C60
P	F		5910-683-3008							C	B018 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B014	EA		REF										1C61
P	F		5910-683-3008							C	B019 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B014	EA		REF										1C62
P	F		5910-107-0757							C	B020 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; IDO-005	EA		1	*	*	2	*	*	2	8	6		1C81
P	F		5910-683-3008							C	B021 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B014	EA		REF										1C82
P	F		5910-270-9083							C	B022 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A991	EA		REF										1C83
P	F		5910-910-2829							C	B023 CAPACITOR, FIXED, ELECTROLYTIC: 14304; C2240	EA		1	*	*	2	*	*	2	8	8		1C3
P	F		5910-902-6958							C	B024 CAPACITOR, FIXED, ELECTROLYTIC: 93790; NLW20-100	EA		2	*	2	2	*	2	2	13	16		1C5
P	F		5910-902-6958							C	B025 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS B024	EA		REF										1C6
P	F									C	B026 CAPACITOR, FIXED, ELECTROLYTIC: 56289; 600D227G020DG0	EA		3	*	2	2	2	2	2	27	40		1C11
P	F		5910-9[illegible]-2865							C	B027 CAPACITOR, FIXED, ELECTROLYTIC: 05079; S15-20C2MI	EA		2	*	1	1	*	1	1	13	4		1C40
P	F									C	B028 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS B026	EA		REF										1C56
P	F									C	B029 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS B026	EA		REF										1C58
P	F		[illegible]							C	B030 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS B027	EA		REF										1C74
P	F		[illegible]							C	B031 CAPACITOR, FIXED, PAPER, DIELECTRIC: 01002; 28F1529G2	EA		1	*	*	2	*	*	2	8	9	2-2	1C1

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	F		5910-910-4161							C	B032 CAPACITOR, FIXED, PAPER, DIELECTRIC: 01002; 23F1227G2	EA		1	*	*	2	*	*	2	8	9	2-2	1C2
P	F		5910-543-9502							C	B033 CAPACITOR, FIXED, PAPER, DIELECTRIC: 56289; 96P10406S4	EA		1	*	*	2	*	*	2	8	9		1C80
P	F									C	B034 CAPACITOR BRACKET ASSEMBLY: 14304; 162-0309	EA		1	*	2	2	*	2	2	18	6		1A21
X2	F		5305-993-0190							*	B035 SCREW, MACHINE: SAME AS A139	EA		1										
X2	F		5305-984-4983							*	B036 SCREW, MACHINE: SAME AS A053	EA		1										
X2	F		5310-515-7999							*	B037 WASHER, LOCK: SAME AS A042	EA		1										
X2	F		5310-515-7997							*	B038 WASHER, LOCK: SAME AS A054	EA		1										
M	D									D	B039 BRACKET, ANGLE: 14304; 162-0308	EA		1										
X2	F									D	B040 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 357-000X5U0152M	EA		8										1A21C63
X2	F									D	B041 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B040	EA		REF										1A21C64
X2	F									D	B042 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B040	EA		REF										1A21C65
X2	F									D	B043 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B040	EA		REF										1A21C66
X2	F									D	B044 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B040	EA		REF										1A21C67
X2	F									D	B045 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B040	EA		REF										1A21C68
X2	F									D	B046 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B040	EA		REF										1A21C69
X2	F									D	B047 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS B040	EA		REF										1A21C70
X2	F									D	B048 CONNECTOR, RECEPACLE, ELECTRICAL: 14304; 162-0324	EA		1										1A21J3
X2	F									D	B049 TERMINAL, LUG: SAME AS A236	EA		1										

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
						MODEL									DS			GS						
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-20	(B) 21-50	(C) 51-100	(A) 1-20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F		5310-954-9965							*	B050 NUT, PLAIN, HEXAGON: SAME AS A951	EA		1										
X2	F		5305-984-4983							*	B051 SCREW, MACHINE: SAME AS A053	EA		1										
X2	F									C	B052 CHAIN, STUD LINK: 14304; 162-0145	EA		1										
M	D									C	B053 CHASSIS, ELECTRICAL EQUIPMENT: 14304; 162-0054	EA		1										
X2	F									C	B054 CLAMP, LOOP: 83330; 835	EA		1										
X2	F		5310-655-6534							*	B055 NUT, ASSEMBLED WASHER: SAME AS A021	EA		1										
X2	F		5310-167-0812							*	B056 WASHER, FLAT: 88044; AN960C10L	EA		1										
X2	F		5340-619-7754							C	B057 CLAMP, LOOP: 09922; HP3N	EA		2										
X2	F		5310-063-8761							*	B058 NUT, PLAIN, HEXAGON: SAME AS A296	EA		1										
X2	F		5310-515-7999							*	B059 WASHER, LOCK: SAME AS A042	EA		1										
X2	F		5340-619-7754							C	B060 CLAMP, LOOP: SAME AS B057	EA		REF										
X2	F		5310-063-8761							*	B061 NUT, PLAIN, HEXAGON: SAME AS A296	EA		1										
X2	F		5310-515-7999							*	B062 WASHER, LOCK: SAME AS A042	EA		1										
X2	F		5340-598-0383							C	B063 CLAMP, LOOP: 09922; HP4N	EA		3										
X2	F		5310-969-6959							*	B064 NUT, ASSEMBLED WASHER: SAME AS A029	EA		1										
X2	F		5305-984-4983							*	B065 SCREW, MACHINE: SAME AS A053	EA		1										
X2	F		5310-531-9514							*	B066 WASHER, FLAT: SAME AS A032	EA		1										
X2	F		5340-598-0383							C	B067 CLAMP, LOOP: SAME AS B063	EA		REF										
X2	F		5310-969-6959							*	B068 NUT, ASSEMBLED WASHER: SAME AS A029	EA		1										
X2	F		5305-984-4983							*	B069 SCREW, MACHINE: SAME AS A053	EA		1										
X2	F		5310-531-9514							*	B070 WASHER, FLAT: SAME AS A032	EA		1										
X2	F		5340-598-0383							C	B071 CLAMP, LOOP: SAME AS B063	EA		REF										
X2	F		5310-969-6959							*	B072 NUT, ASSEMBLED WASHER: SAME AS A029	EA		1										

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
			(2)	MODEL							(3)					DS			GS						
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	FEDERAL STOCK NUMBER	1	2	3	4	5	6	IND CD		DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-20	(B) 21-50	(C) 51-100	(A) 1-20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F		5305-984-4989							*	B073	SCREW, MACHINE: 96906; MS35206-229	EA		1										
X2	F		5310-531-9514							*	B074	WASHER, FLAT: SAME AS A032	EA		1										
P	F		5950-088-1720							C	B075	COIL, RADIO FREQUENCY: 99800; 1537-94	EA		3	*	1	2	*	1	1	18	4		1L1
P	F		5950-088-1720							C	B076	COIL, RADIO FREQUENCY: SAME AS B075	EA		REF										1L2
P	F		5950-088-1720							C	B077	COIL, RADIO FREQUENCY: SAME AS B075	EA		REF										1L3
P	F		5950-910-2794							C	B078	COIL, RADIO FREQUENCY: 14304; 162-0154	EA		1	*	*	2	*	*	2	8	6	2-6	1L5
P	F		5950-060-9188							C	B079	COIL, RADIO FREQUENCY: 99800; 2500-28	EA		1	*	*	1	*	*	1	8	4		1L7
P	F		5950-814-1608							C	B080	COIL, RADIO FREQUENCY: 99800; 2500-36	EA		1	*	*	1	*	*	1	8	4		1L9
X2	F									C	B081	COLLAR, SHAFT: 73734; 45G	EA		1									6-10	8
P	F									C	B082	CONNECTOR, PLUG, ELECTRICAL: 16733; 1306-196	EA		12	2	3	5	2	2	2	53	168	2-4	1P7
P	F									C	B083	CONNECTOR, PLUG, ELECTRICAL: SAME AS B082	EA		REF									2-4	1P8
P	F									C	B084	CONNECTOR, PLUG, ELECTRICAL: SAME AS B082	EA		REF									2-2	1P12
P	F									C	B085	CONNECTOR, PLUG, ELECTRICAL: SAME AS B082	EA		REF									2-2	1P13
P	F									C	B086	CONNECTOR, PLUG, ELECTRICAL: SAME AS B082	EA		REF									2-2	1P16
P	F									C	B087	CONNECTOR, PLUG, ELECTRICAL: SAME AS B082	EA		REF									2-2	1P17
P	F									C	B088	CONNECTOR, PLUG, ELECTRICAL: 14304; 162-0375	EA		1	*	*	2	*	*	2	8	14		1P20
P	F									C	B089	CONNECTOR, PLUG, ELECTRICAL: SAME AS B082	EA		REF									2-2	1P24
P	F									C	B090	CONNECTOR, PLUG, ELECTRICAL: 14304; 162-0373	EA		1	*	*	2	*	*	2	8	14	2-2	1P31

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	F									C	B091 CONNECTOR, PLUG, ELECTRICAL: SAME AS B082	EA		REF									2-4	1P33
P	F									C	B092 CONNECTOR, PLUG, ELECTRICAL: SAME AS B082	EA		REF									2-4	1P34
P	F									C	B093 CONNECTOR, PLUG, ELECTRICAL: SAME AS B082	EA		REF									2-4	1P35
P	F									C	B094 CONNECTOR, PLUG, ELECTRICAL: SAME AS B082	EA		REF									2-4	1P42
P	F									C	B095 CONNECTOR, PLUG, ELECTRICAL: SAME AS B082	EA		REF									2-4	1P43
P	F		5935-822-7614							C	B096 CONNECTOR, RECEPTACLE, ELECTRICAL: 11139; DM9601-7P	EA		2	*	2	2	*	2	2	13	28		1J1
P	F		5935-822-7614							C	B097 CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS B096	EA		REF										1J2
P	F		5935-883-8140							C	B098 CONNECTOR, RECEPTACLE, ELECTRICAL: 11139; DM9601-12S	EA		1	*	*	2	*	*	2	8	14	2-3	1J3
P	F		5935-814-8601							C	B099 CONNECTOR, RECEPTACLE, ELECTRICAL: 02660; 83-875	EA		1	*	*	2	*	*	2	8	14	2-3	1J4
P	F		5935-729-8117							C	B100 CONNECTOR, RECEPTACLE, ELECTRICAL: 11139; DM9601-7S	EA		1	*	*	2	*	*	2	8	14	2-2	1J5
P	F		5935-498-2076							C	B101 CONNECTOR, RECEPTACLE, ELECTRICAL: 14304; 162-0199	EA		1	*	*	2	*	*	2	8	14		1J18
X2	F									*	B102 NUT, ASSEMBLED WASHER: SAME AS A582	EA		1										
X2	F		5305-993-0190							*	B103 SCREW, MACHINE: SAME AS A139	EA		2										
X2	F		5310-515-7999							*	B104 WASHER, LOCK: SAME AS A042	EA		1										
P	F		5935-910-2877							C	B105 CONNECTOR, RECEPTACLE, ELECTRICAL: 24046; 6040-23SCH	EA		1	*	*	2	*	*	2	8	14		1J23
X2	F									*	B106 NUT, ASSEMBLED WASHER: SAME AS A582	EA		2										
X2	F		5305-889-2997							*	B107 SCREW, MACHINE: SAME AS A297	EA		2										
P	F		5935-498-2066							C	B108 CONNECTOR, RECEPTACLE, ELECTRICAL: 14304; 162-0148	EA		1	*	*	2	*	*	2	8	14		1J24

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
															DS			GS						
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1 - 20	(B) 21-50	(C) 51-100	(A) 1 - 20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F		5305-889-3116							*	B109	SCREW, MACHINE: SAME AS A041	EA		2									
X2	F		5310-515-7999							*	B110	WASHER, LOCK: SAME AS A042	EA		2									
P	F		5935-498-2075							C	B111	CONNECTOR, RECEPTACLE, ELECTRICAL: 14304; 162-0173	EA		1	*	*	2	*	*	2	8	14		1J26
P	F		5935-498-2067							C	B112	CONNECTOR, RECEPTACLE, ELECTRICAL: 14304; 162-0149	EA		2	*	2	2	*	*	2	13	28		1J28
X2	F		5305-889-3116							*	B113	SCREW, MACHINE: SAME AS A041	EA		2									
X2	F		5310-515-7999							*	B114	WASHER, LOCK: SAME AS A042	EA		2									
P	F		5935-924-9420							C	B115	CONNECTOR, RECEPTACLE, ELECTRICAL: 16733; 1103	EA		1	*	*	2	*	*	2	8	14	2-6	1J30
P	F		5935-258-9961							C	B116	CONNECTOR, RECEPTACLE, ELECTRICAL: 01009; 462M1NFB	EA		1	*	*	2	*	*	2	8	14		1J38
X2	F									*	B117	NUT, PLAIN, HEXAGON: SAME AS A648	EA		1										
X2	F		5305-958-6382							*	B118	SCREW, MACHINE: 96906; MS35206-206	EA		1										
X2	F		5310-928-2690							*	B119	WASHER, LOCK: SAME AS A651	EA		1										
P	F		5935-498-2067							C	B120	CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS B112	EA		REF										1J40
X2	F		5305-993-0190							*	B121	SCREW, MACHINE: SAME AS A139	EA		2										
X2	F		5310-515-7999							*	B122	WASHER, LOCK: SAME AS A042	EA		2										
M	F									C	B123	COUPLING, SHAFT, FLEXIBLE: SAME AS A100	EA		3									6-10	9
M	F									C	B124	COUPLING, SHAFT, FLEXIBLE: SAME AS A100	EA		REF									6-10	10
M	F									C	B125	COUPLING, SHAFT, FLEXIBLE: SAME AS A100	EA		REF									6-10	23
M	F									C	B126	COUPLING, SHAFT, RIGID: SAME AS A101	EA		3										
X2	F		5305-531-0137							*	B127	SETSCREW: SAME AS A170	EA		2										
M	F									C	B128	COUPLING, SHAFT, RIGID: SAME AS A101	EA		REF										

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE																									
X2	F		5305-531-0137							*	B129	SETSCREW: SAME AS A170	EA		2										
M	F									C	B130	COUPLING, SHAFT, RIGID: SAME AS A101	EA		REF										
X2	F		5305-531-0137							*	B131	SETSCREW: SAME AS A170	EA		2										
X2	F		3010-670-1701							C	B132	COUPLING, SHAFT, FLEXIBLE: SAME AS A105	EA		2									6-10	12
X2	F		5305-531-0137							*	B133	SETSCREW: SAME AS A170	EA		2									6-10	11
X2	F		3010-670-1701							C	B134	COUPLING, SHAFT, FLEXIBLE: SAME AS A105	EA		REF									6-10	14
X2	F		5305-531-0137							*	B135	SETSCREW: SAME AS A170	EA		2									6-10	13
M	D									C	B136	COVER, ACCESS, ELECTRICAL COMPONENTS: 14304; 162-0378	EA		1									6-10	6
X2	F		5305-889-3116							*	B137	SCREW, MACHINE: SAME AS A041	EA		6									6-10	4
X2	F		5310-515-7999							*	B138	WASHER, LOCK: SAME AS A042	EA		6									6-10	5
A	F	S								C	B139	COVER ASSEMBLY, RECEIVER-RADIO: 14304; 162-0108	EA		1										1A23
X2	F									*	B140	SCREW, MACHINE: 14304; H0410	EA		20										
X2	F									*	B141	SCREW, MACHINE: 14304; H0412	EA		2										
M	D									D	B142	BRACKET, ANGLE: 14304; 162-0129	EA		1										
X2	F									*	B143	NUT, ASSEMBLED WASHER: SAME AS A582	EA		2										
P	F		5910-892-7736							D	B144	CAPACITOR, FIXED, PLASTIC DIELECTRIC: 93790; WMF4W1	EA		1	*	*	2	*	*	2	8	9		1A23C38
X2	F		5340-560-9262							D	B145	CLAMP, LOOP: 09922; HP13N	EA		1										
X2	F									*	B146	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1										
X2	F		5340-919-9400							D	B147	CLAMP, RIM CLENCHING: 82877; 16410	EA		3										
X2	F									*	B148	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1										
X2	F		5340-919-9400							D	B149	CLAMP, RIM CLENCHING: SAME AS B147	EA		REF										
X2	F									*	B150	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1										

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
X2	F		5340-919-9400							D	B151 CLAMP, RIM CLENCHING: SAME AS B147	EA		REF										
X2	F									*	B152 NUT, ASSEMBLED WASHER: SAME AS A582	EA		1										
P	F		5935-795-3004							D	B153 CONNECTOR, RECEPTACLE, ELECTRICAL: 01009; 462M1NMB	EA		1	*	*	2	*	*	2	8	14		1A23P38
X2	F									*	B154 NUT, PLAIN, HEXAGON: SAME AS A648	EA		1										
X2	F		5305-958-6382							*	B155 SCREW, MACHINE: SAME AS B118	EA		1										
X2	F		5310-928-2690							*	B156 WASHER, LOCK: SAME AS A651	EA		1										
M	D									D	B157 COVER, RECEIVER-TRANSMITTER: 14304; 162-0341	EA		1										
P	F		4140-965-7580							D	B158 FAN, CENTRIFUGAL: 82877; TYPERLSER682YS	EA		1	*	*	*	*	*	*	5	4		1A23B1
X2	F									D	B159 GASKET: 14304; 162-0134	EA		2										
X2	F									D	B160 GASKET: SAME AS B159	EA		REF										
X2	F									D	B161 GASKET: 14304; 162-0135	EA		1										
X2	F									D	B162 GASKET: 14304; 162-0389	EA		1										
M	D									D	B163 PLATE, MOUNTING, FAN: 14304; 162-0359	EA		1										
X2	F									D	B164 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		2										
X2	F									D	B165 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F		5340-586-4361							C	B166 COVER, ACCESS SELF CLOSING: 82389; 520	EA		1										
P	O		5355-404-4774							C	B167 DIAL, CONTROL: 14304; 162-0064	EA		1	*	*	*	*	*	*	5	5		
X2	O		5305-082-6782							*	B168 SETSCREW: 96906; MS51021-36	EA		2										
P	O		5355-403-9923							C	B169 DIAL, CONTROL: 14304; 162-0065	EA		2	*	*	2	*	*	2	10	10		
X2	O		5305-082-6782							*	B170 SETSCREW: SAME AS B168	EA		2										
P	O		5355-403-9923							C	B171 DIAL, CONTROL: SAME AS B169	EA		REF										

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE (4)	QTY INC IN UN PK (5)	QTY INC IN UNIT (6)	30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
X2	0		5305-082-6782							*	B172 SETSCREW: SAME AS B168	EA		2										
P	0		5355-403-9924							C	B173 DIAL, CONTROL: 14304; 162-0066	EA		1	*	*	*	*	*	*	5	5		
X2	0		5305-082-6782							*	B174 SETSCREW: SAME AS B168	EA		2										
P	0		5355-403-9925							C	B175 DIAL, CONTROL: 14304; 162-0067	EA		2	*	*	2	*	*	2	10	10		
X2	0		5305-800-7261							*	B176 SETSCREW: 96906; MS51021-9	EA		1										
P	0		5355-403-9925							C	B177 DIAL, CONTROL: SAME AS B175	EA		REF										
X2	0		5305-800-7261							*	B178 SETSCREW: SAME AS B176	EA		1										
M	D									C	B179 DUCT, EXHAUST, RECEIVER-TRANSMITTER: 14304; 162-0096	EA		1									2-2	1MP48
X2	0		5305-993-0190							*	B180 SCREW, MACHINE: SAME AS A139	EA		7										
X2	0		5310-515-7999							*	B181 WASHER, LOCK: SAME AS A042	EA		7										
P	0		5960-904-9744							C	B182 ELECTRON TUBE: 80131; 6146B	EA		3	9	22	42	13	11	11	514	300	2-6	1V1
P	0		5960-904-9744							C	B183 ELECTRON TUBE: SAME AS B182	EA		REF									2-6	1V2
P	0		5960-904-9744							C	B184 ELECTRON TUBE: SAME AS B182	EA		REF									2-6	1V3
X2	F									C	B185 EXTENSION SHAFT: 14304; H0090	EA		2										
X2	F		5305-531-0137							*	B186 SETSCREW: SAME AS A170	EA		1										
X2	F									C	B187 EXTENSION SHAFT: SAME AS B185	EA		REF										
X2	F		5305-531-0137							*	B188 SETSCREW: SAME AS A170	EA		1										
A	F	S								C	B189 FILTER ASSEMBLY: 14304; 162-1900	EA		1									3-53	1A19
X2	F		5305-993-0190							*	B190 SCREW, MACHINE: SAME AS A139	EA		1										
X2	F									*	B191 SCREW, MACHINE: SAME AS A622	EA		1										
X2	F		5310-782-1349							*	B192 WASHER, FLAT: SAME AS A111	EA		1										
M	D									D	B193 BRACKET, FILTER ASSEMBLY: 14304; 162-1905	EA		1										

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5910-992-5021							D	B194	CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15F111J500	EA		4							27	30	3-53	1A19C42
P	D		5910-992-5021							D	B195	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B194	EA		REF									3-53	1A19C43
P	D		5910-992-5021							D	B196	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B194	EA		REF									3-53	1A19C46
P	D		5910-992-5021							D	B197	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B194	EA		REF									3-53	1A19C47
P	D		5910-950-9196							D	B198	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: 72982; 557-000-34E	EA		4							19	16	3-53	1A19C41
X2	D									*	B199	NUT, ASSEMBLED WASHER: SAME AS A582	EA		2										
X2	D		5305-993-0190							*	B200	SCREW, MACHINE: SAME AS A139	EA		2										
P	D		5910-950-9196							D	B201	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B198	EA		REF									3-53	1A19C44
X2	D									*	B202	NUT, ASSEMBLED WASHER: SAME AS A582	EA		2										
X2	D		5305-993-0190							*	B203	SCREW, MACHINE: SAME AS A139	EA		2										
P	D		5910-950-9196							D	B204	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B198	EA		REF									3-53	1A19C45
X2	D									*	B205	NUT, ASSEMBLED WASHER: SAME AS A582	EA		2										
X2	D		5305-993-0190							*	B206	SCREW, MACHINE: SAME AS A139	EA		2										
P	D		5910-950-9196							D	B207	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B198	EA		REF									3-53	1A19C48
X2	D									*	B208	NUT, ASSEMBLED WASHER: SAME AS A582	EA		2										
X2	D		5305-993-0190							*	B209	SCREW, MACHINE: SAME AS A139	EA		2										
P	D		5915-818-4832							D	B210	FILTER, BAND PASS: 13499; 526-9365-000	EA		1							4	7	3-53	1A19FL5
P	D									D	B211	FILTER, BAND PASS: 13499; 526-9364-000	EA		1							4	7	3-53	1A19FL6
X2	D									D	B212	O RING: 42498; 622709	EA		2										

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D									D	B213	O RING: SAME AS B212	EA		REF										
M	D									D	B214	PLATE, MENDING: 14304; 162-1906	EA		2										
X2	D									*	B215	NUT, ASSEMBLED WASHER: SAME AS A582	EA		3										
X2	D		5305-889-2997							*	B216	SCREW, MACHINE: SAME AS A297	EA		3										
M	D									D	B217	PLATE, MENDING: SAME AS B214	EA		REF										
X2	D		5940-271-5952							D	B218	TERMINAL, LUG: 78584; 902	EA		4										
X2	D		5940-271-5952							D	B219	TERMINAL, LUG: SAME AS B218	EA		REF										
X2	D		5940-271-5952							D	B220	TERMINAL, LUG: SAME AS B218	EA		REF										
X2	D		5940-271-5952							D	B221	TERMINAL, LUG: SAME AS B218	EA		REF										
P	C		5920-012-0151							C	B222	FUSE, CARTRIDGE: 81349; F02A32V15A	EA		1	2	3	6	3	2	2	71	75		1F1
P	C		5920-557-2647							C	B223	FUSE, CARTRIDGE: 81349; F02A4R00A	EA		1	2	3	6	3	2	2	71	75		1F2
X2	F									C	B224	FUSEHOLDER: 71400; HKXW22-33V	EA		1									2-3	1XF1
X2	F									C	B225	FUSEHOLDER: 71400; HK1WX15A	EA		1									2-3	1XF2
X2	F									C	B226	GASKET: 14304; 162-0133	EA		1										
X2	F									C	B227	GASKET: 14304; 425-0030	EA		2										
X2	F									C	B228	GASKET: SAME AS B227	EA		REF										
X2	F									C	B229	GASKET: 14304; 425-0034	EA		4										
X2	F									C	B230	GASKET: SAME AS B229	EA		REF										
X2	F									C	B231	GASKET: SAME AS B229	EA		REF										
X2	F									C	B232	GASKET: SAME AS B229	EA		REF										
X2	F									C	B233	GASKET: 14304; 425-0032	EA		12										
X2	F									C	B234	GASKET: SAME AS B233	EA		REF										

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
X2	F									C	B235 GASKET: SAME AS B233	EA		REF										
X2	F									C	B236 GASKET: SAME AS B233	EA		REF										
X2	F									C	B237 GASKET: SAME AS B233	EA		REF										
X2	F									C	B238 GASKET: SAME AS B233	EA		REF										
X2	F									C	B239 GASKET: SAME AS B233	EA		REF										
X2	F									C	B240 GASKET: SAME AS B233	EA		REF										
X2	F									C	B241 GASKET: SAME AS B233	EA		REF										
X2	F									C	B242 GASKET: SAME AS B233	EA		REF										
X2	F									C	B243 GASKET: SAME AS B233	EA		REF										
X2	F									C	B244 GASKET: SAME AS B233	EA		REF										
P	F									C	B245 GEAR ASSEMBLY, SPEED DECREASER: 14304; 162-0900	EA		1	*	*	*	*	*	*	4	4	3-55	1MP70
X2	F		5305-984-4983							*	B246 SCREW, MACHINE: SAME AS A053	EA		3										
X2	F		5310-515-7997							*	B247 WASHER, LOCK: SAME AS A054	EA		3										
X1										D	B248 BEARING PLATE SUBASSEMBLY: 14304; 162-0920	EA		1									3-55	1
X1										*	B249 SCREW, MACHINE: SAME AS A139	EA		4									3-55	2
X1										*	B250 WASHER,LOCK: SAME AS A042	EA		4									3-55	3
X1										E	B251 BEARING, SLEEVE: 14304; 162-0337	EA		1									3-55	12
X1										E	B252 PLATE, MOUNTING, BEARING: 14304; 162-0912	EA		1									3-55	1
X1										D	B253 BRACKET, DOUBLE ANGLE: 14304; 162-0911	EA		1									3-55	21
X1										D	B254 BRACKET, EYE, NONROTATING SHAFT: 14304; 162-0914	EA		1									3-55	4

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
PF										D	B255 CAPACITOR, VARIABIE, AIR: 17660; 9434-60-20075	EA		1	*	*	2	*	*	2	8	4	3-55	31
X1										D	B256 FAIRIEAD, ROLLER: 14304; 162-0918	EA		1									3-55	14
X1										D	B257 GEAR, ANTIBACK-LASH, SPUR: 14304; 162-0144	EA		1									3-55	27
X1										*	B258 SETSCREW: SAME AS B176	EA		2									3-55	28
X1										D	B259 GEAR, SPUR: 00141; G14-30P3	EA		1									3-55	10
X1										*	B260 PIN, SPRING: 72962; 79-022-094-0500	EA		1									3-55	11
X1										D	B261 SHAFT, SHOULDERED: 14304; 162-0919	EA		1									3-55	12
X1										*	B262 RING, RETAINING: 79136; 5555-25MD	EA		1									3-55	13
X1										*	B263 SCREW, MACHINE: SAME AS A139	EA		1									3-55	15
X1										*	B264 WASHER, LOCK: SAME AS A042	EA		1									3-55	16
X1										D	B265 SHAFT, STRAIGHT: 14304; 162-0917	EA		1									3-55	6
X1										D	B266 SPACER, SLEEVE: 14304; H4604	EA		3									3-55	24
X1										*	B267 SCREW, MACHINE: SAME AS A139	EA		1									3-55	22
X1										*	B268 WASHER, LOCK: SAME AS A042	EA		1									3-55	23
X1										D	B269 SPACER, SLEEVE: SAME AS B266	EA		REF									3-55	24
X1										*	B270 SCREW, MACHINE: SAME AS A139	EA		1									3-55	22
X1										*	B271 WASHER, LOCK: SAME AS A042	EA		1									3-55	23
X1										D	B272 SPACER, SLEEVE: SAME AS B266	EA		REF									3-55	24
X1										*	B273 SCREW, MACHINE: SAME AS A139	EA		1									3-55	22
X1										*	B274 WASHER, LOCK: SAME AS A042	EA		1									3-55	23
X1										D	B275 SPACER, SLEEVE: 14304; H4608	EA		1									3-55	20
X1										*	B276 SCREW, MACHINE: SAME AS A139	EA		1									3-55	18
X1										*	B277 WASHER, LOCK: SAME AS A042	EA		1									3-55	19

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1 - 20	DS (B) 21-50	DS (C) 51-100	GS (A) 1 - 20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X1										D	B278	SPACER, STEPPED: 14304; 162-0335	EA		1									3-55	25
X1										*	B279	SCREW, MACHINE: SAME AS A139	EA		1									3-55	22
X1										*	B280	WASHER, LOCK: SAME AS A042	EA		1									3-55	23
X1										D	B281	SPRING, SPIRAL, TORSION: 14304; MP0283	EA		1									3-55	5
X1										D	B282	SPROCKET, WHEEL: SAME AS A169	EA		1									3-55	7
X1										*	B283	PIN, SPRING: SAME AS B260	EA		1									3-55	8
X1										D	B284	WASHER, LOCK: 96906; MS35333-74	EA		1									3-55	30
X1										D	B285	WASHER, SPRING TENSION: SAME AS A830	EA		1									3-55	9
P	F									C	B286	GEAR ASSEMBLY, SPEED DECREASER: 14304; 162-0750	EA		1	*	*	*	*	*	*	4	4	3-54	1MP71
X2	F		5310-969-6959							*	B287	NUT, ASSEMBLED WASHER: SAME AS A029	EA		2										
X2	F		5310-531-9514							*	B288	WASHER, FLAT: SAME AS A032	EA		2										
X1										D	B289	COVER, GEAR ASSEMBLY: 14304; 162-0763	EA		1									3-54	2
X1										*	B290	SCREW, TAPPING, THREAD CUTTING: 14304; H5083	EA		4									3-54	1
X1										D	B291	GEAR, IDLER: 14304; 162-0755	EA		3									3-54	9
X1										D	B292	GEAR, IDLER: SAME AS B291	EA		REF									3-54	10
X1										D	B293	GEAR, IDLER: SAME AS B291	EA		REF									3-54	11
X1										D	B294	IDLER SHAFT MOUNTING PLATE SUBASSEMBLY: 14304; 162-0754	EA		1									3-54	13
X1										E	B295	PLATE, MOUNTING, IDLER SHAFT: 14304; 162-0762	EA		1									3-54	13
X1										E	B296	SHAFT, STRAIGHT: 14304; 162-0758	EA		3									3-54	12
X1										E	B297	SHAFT, STRAIGHT: SAME AS B296	EA		REF									3-54	12
X1										E	B298	SHAFT, STRAIGHT: SAME AS B296	EA		REF									3-54	12

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1 - 20	DS (B) 21-50	DS (C) 51-100	GS (A) 1 - 20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X1										D	B299	PLATE, MOUNTING, SPUR GEAR: 14304; 162-0761	EA		1								3-54	3
X1										D	B300	SPUR GEAR SUBASSEMBLY: 14304; 162-0752	EA		1								3-54	4
X1										E	B301	GEAR, SPUR: 14304; 162-0757	EA		1								3-54	4
X1										E	B302	SHAFT, STRAIGHT: 14304; 162-0760	EA		1								3-54	4
X1										D	B303	SPUR GEAR SUBASSEMBLY: 14304; 162-0753	EA		1								3-54	8
X1										E	B304	GEAR, SPUR: 14304; 162-0756	EA		1								3-54	8
X1										*	B305	PIN, STRAIGHT, HEADLESS: 14304; H5084	EA		1								3-54	7
X1										E	B306	SHAFT, STRAIGHT: 14304; 162-0759	EA		1								3-54	5
X1										D	B307	WASHER, SPRING TENSION: SAME AS A830	EA		1								3-54	6
X2	F		5325-754-2288							C	B308	GROMMET, RUBBER: 73734; 1656	EA		2									
X2	F		5325-754-2288							C	B309	GROMMET, RUBBER: SAME AS B308	EA		REF									
X2	F									C	B310	GROMMET, RUBBER: 73734; 1657	EA		5									
X2	F									C	B311	GROMMET, RUBBER: SAME AS B310	EA		REF									
X2	F									C	B312	GROMMET, RUBBER: SAME AS B310	EA		REF									
X2	F									C	B313	GROMMET, RUBBER: SAME AS B310	EA		REF									
X2	F									C	B314	GROMMET, RUBBER: SAME AS B310	EA		REF									
X2	F		5325-959-4230							C	B315	GROMMET, RUBBER: 73734; 1659	EA		4									
X2	F		5325-959-4230							C	B316	GROMMET, RUBBER: SAME AS B315	EA		REF									
X2	F		5325-959-4230							C	B317	GROMMET, RUBBER: SAME AS B315	EA		REF									
X2	F		5325-959-4230							C	B318	GROMMET, RUBBER: SAME AS B315	EA		REF									
X2	F									C	B319	GROMMET, RUBBER: 73734; 1660	EA		2									
X2	F									C	B320	GROMMET, RUBBER: SAME AS B319	EA		REF									

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F		5325-202-3820							C	B321 GROMMET, RUBBER: 73734; 1662	EA		6										
X2	F		5325-202-3820							C	B322 GROMMET, RUBBER: SAME AS B321	EA		REF										
X2	F		5325-202-3820							C	B323 GROMMET, RUBBER: SAME AS B321	EA		REF										
X2	F		5325-202-3820							C	B324 GROMMET, RUBBER: SAME AS B321	EA		REF										
X2	F		5325-202-3820							C	B325 GROMMET, RUBBER: SAME AS B321	EA		REF										
X2	F		5325-202-3820							C	B326 GROMMET, RUBBER: SAME AS B321	EA		REF										
X2	F									C	B327 HANDLE, BOW: 04183; 1007-12	EA		1									2-2	1MP91
X2	F									*	B328 SCREW, MACHINE: 73734; 19085	EA		2										
X2	F		5310-551-6308							*	B329 WASHER, LOCK: 96906; MS35339-43	EA		2										
X2	O									C	B330 HOUSING, RECEIVER-TRANSMITTER: 14304; 425-0111	EA		1										
X2	O									*	B331 SCREW, MACHINE: SAME AS A110	EA		12										
X2	O		5310-782-1349							*	B332 WASHER, FLAT: SAME AS A111	EA		12										
X2	F									C	B333 INSULATION DISK: 14304; E0066	EA		2										
X2	F									C	B333A INSULATION DISK: SAME AS B333	EA		REF										
P	F		5935-732-0545							C	B334 JACK, TELEPHONE: 82389; 32A	EA		1	*	*	2	*	*	2	8	5	2-2	1J100
P	O		5335-680-1357							C	B335 KNOB: 42498; 7F2L	EA		3	*	2	2	*	2	2	18	21		1MP94
X2	O		5305-655-9246							*	B336 SETSCREW: 96906; MS51021-10	EA		2										
P	O		5335-680-1357							C	B337 KNOB: SAME AS B335	EA		REF										1MP95
X2	O		5305-655-9246							*	B338 SETSCREW: SAME AS B336	EA		2										
P	O		5335-680-1357							C	B339 KNOB: SAME AS B335	EA		REF										
X2	O		5305-655-9246							*	B340 SETSCREW: SAME AS B336	EA		2										
P	O		5355-942-7240							C	B341 KNOB: SAME AS A147	EA		1										1MP97
X2	O		5305-655-9246							*	B342 SETSCREW: SAME AS B336	EA		1										

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	O		5305-619-4580							*	B343 SETSCREW: 96906; MS51021-15	EA		1											
P	O		5355-556-0151							C	B344 KNOB: 55938; 70-2-2G	EA		2	*	2	2	*	*	2	13	14		
X2	O		5305-655-9246							*	B345 SETSCREW: SAME AS B336	EA		2										
P	O		5355-556-0151							C	B346 KNOB: SAME AS B344	EA		REF										
X2	O		5305-655-9246							*	B347 SETSCREW: SAME AS B336	EA		2										
P	F		5915-191-9359							C	B358 LOCAL CONTROL FILTER ASSEMBLY: 14304; 162-0197	EA		1	*	2	2	*	*	2	12	3		1A22
X2	F									*	B359 SCREW, MACHINE: 14304; H0608	EA		2										
M	D									D	B360 BRACKET, ANGLE: SAME AS A902	EA		2										
X2	F									*	B361 NUT, ASSEMBLED WASHER: SAME AS A582	EA		1										
X2	F		5305-889-3116							*	B362 SCREW, MACHINE: SAME AS A041	EA		1										
X2	F									*	B363 WASHER, LOCK: 73734; 1302	EA		1										
M	D									D	B364 BRACKET, ANGLE: SAME AS A902	EA		REF										
X2	F									*	B365 NUT, ASSEMBLED WASHER: SAME AS A582	EA		1										
X2	F		5305-889-3116							*	B366 SCREW, MACHINE: SAME AS A041	EA		1										

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									*	B367	WASHER, LOCK: SAME AS B363	EA		1									
X1	F									D	B368	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		1									1A2C52
X1	F									D	B369	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A633	EA		3									1A2C53
X1	F		5910-683-3008							D	B370	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A633	EA		REF									1A2C54
X1	F		5910-683-3008							D	B371	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A633	EA		REF									1A2C55
X2	F									D	B372	CONNECTOR, RECEPACLE, ELECTRICAL: 14304; 162-0387	EA		1									
M	D									D	B373	COVER, LOCAL CONTROL FILTER ASSEMBLY: 14304; 162-0198	EA		1									
X2	F									D	B374	TERMINAL, LUG: SAME AS A581	EA		2									
X2	F									D	B375	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									D	B376	TERMINAL, STUD: 14304; E0800	EA		4									
X2	F									D	B377	TERMINAL, STUD: SAME AS B376	EA		REF									
X2	F									D	B378	TERMINAL, STUD: SAME AS B376	EA		REF									
X2	F									D	B379	TERMINAL, STUD: SAME AS B376	EA		REF									
P	F		5965-241-3745							C	B380	LOUDSPEAKER PERM MAGNET: 14304; LS0003	EA		1	*	*	*	*	*	*	4	18	
X2	F									*	B381	NUT, PLAIN, PLATE: 97393; SL200-4AA11	EA		4									
X2	F		5305-687-7268							*	B382	SCREW, MACHINE: 95987; N632-1-2	EA		4									
X2	F									C	B383	LOUVER, METAL: 14304; 425-0115	EA		1									
A	F	S								C	B384	MIXER STAGE, FREQUENCY: 14304; 162-0400	EA		1								3-16	1A3
X2	F		5305-889-3116							*	B385	SCREW, MACHINE: SAME AS A041	EA		4									
X2	F									*	B386	WASHER, FLAT: SAME AS A623	EA		4									

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
															DS			GS						
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1 - 20	(B) 21-50	(C) 51-100	(A) 1 - 20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F		5310-515-7999							*	B387 WASHER, LOCK: SAME AS A042	EA		4										
P	D		5910-401-6254							D	B388 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		27									3-16	1A3C1
P	D		5910-401-6254							D	B389 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C2
P	D		5910-934-2752							D	B390 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 835-000X5V0502Z	EA		1							8	6	3-16	1A3C3
P	D		5910-401-6254							D	B391 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C6
P	D		5910-401-6254							D	B392 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C10
P	D		5910-401-6254							D	B393 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C11
P	D		5910-401-6254							D	B394 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C12
P	D		5910-401-6254							D	B395 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C13
P	D		5910-401-6254							D	B396 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C14
P	D		5910-401-6254							D	B397 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C15
P	D		5910-401-6254							D	B398 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C18
P	D		5910-401-6254							D	B399 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C19
P	D		5910-401-6254							D	B400 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C21
P	D		5910-401-6254							D	B401 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C24
P	D		5910-401-6254							D	B402 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C26

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5910-401-6254							D	B403 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C27
P	D		5910-401-6254							D	B404 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C28
P	D		5910-401-6254							D	B405 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C29
P	D		5910-401-6254							D	B406 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C30
P	D		5910-401-6254							D	B407 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C37
P	D		5910-401-6254							D	B408 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C38
P	D		5910-401-6254							D	B409 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C39
P	D		5910-401-6254							D	B410 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C40
P	D		5910-401-6254							D	B411 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C41
P	D		5910-401-6254							D	B412 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C42
P	D		5910-401-6254							D	B413 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C43
P	D		5910-401-6254							D	B414 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C44
P	D		5910-401-6254							D	B415 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-16	1A3C45
P	D		5910-934-2865							D	B416 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		1									3-16	1A3C17
P	D		5910-088-1625							D	B417 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A186	EA		1									3-16	1A3C4
P	D									D	B418 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15F131J500	EA		3	*	2	2	*	2	2	18	18	3-16	1A3C7

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A)	(B)	(C)	(2)	MODEL						IND CD	(3)						DS			GS						
SOURCE CD	MAINT. CD	REC. CODE	FEDERAL STOCK NUMBER	1	2	3	4	5	6			DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1 - 20	(B) 21-50	(C) 51-100	(A) 1 - 20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5910-825-4340							D	B419	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A484	EA		1									3-16	1A3C9
P	D		5910-992-5021							D	B420	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B194	EA		1									3-16	1A3C23
P	D		5910-851-0690							D	B421	CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM15E390G	EA		1							8	6	3-16	1A3C25
P	D									D	B422	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B418	EA		REF									3-16	1A3C32
P	D									D	B423	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B418	EA		REF									3-16	1A3C35
P	D		5910-782-1219							D	B424	CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15E200J500	EA		2							27	30	3-16	1A3C46
P	D		5910-782-1219							D	B425	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B424	EA		REF									3-16	1A3C47
P	D		5910-051-6919							D	B426	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: 72982; 538-011B2P093R	EA		7							65	60	3-16	1A3C5
P	D		5910-051-6919							D	B427	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B426	EA		REF									3-16	1A3C8
P	D		5910-051-6919							D	B428	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B426	EA		REF									3-16	1A3C16
P	D									D	B429	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: 72982; 538-011B2P090R	EA		2							33	24	3-16	1A3C20
P	D		5910-051-6919							D	B430	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B426	EA		REF									3-16	1A3C22
P	D		5910-051-6919							D	B431	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B426	EA		REF									3-16	1A3C31
P	D		5910-051-6919							D	B432	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B426	EA		REF									3-16	1A3C33
P	D									D	B433	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B429	EA		REF									3-16	1A3C34
P	D		5910-051-6919							D	B434	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B426	EA		REF									3-16	1A3C36

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5950-088-1720							D	B435	COIL, RADIO FREQUENCY: SAME AS A366	EA		7									3-16	1A3L1
P	D		5950-088-1720							D	B436	COIL, RADIO FREQUENCY: SAME AS A366	EA		REF									3-16	1A3L2
P	D		5950-088-1720							D	B437	COIL, RADIO FREQUENCY: SAME AS A366	EA		REF									3-16	1A3L3
P	D		5950-088-1720							D	B438	COIL, RADIO FREQUENCY: SAME AS A366	EA		REF									3-16	1A3L4
P	D		5950-088-1720							D	B439	COIL, RADIO FREQUENCY: SAME AS A366	EA		REF									3-16	1A3L5
P	D		5950-088-1720							D	B440	COIL, RADIO FREQUENCY: SAME AS A366	EA		REF									3-16	1A3L6
P	D		5950-088-1720							D	B441	COIL, RADIO FREQUENCY: SAME AS A366	EA		REF									3-16	1A3L7
P	D		5950-769-4326							D	B442	COIL, RADIO FREQUENCY: 99800; 1537-00	EA		1							13	12	3-16	1A3L8
P	D		5935-704-3506							D	B443	CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		5									3-16	1A3J33
P	D		5935-704-3506							D	B444	CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		REF									3-16	1A3J34
P	D		5935-704-3506							D	B445	CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		REF									3-16	1A3J35
P	D		5935-704-3506							D	B446	CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		REF									3-16	1A3J36
P	D		5935-704-3506							D	B447	CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		REF									3-16	1A3J42
P	D		5915-910-7127							D	B448	FILTER, BAND PASS: 14304; FL0102	EA		1							4	7	3-16	1A3FL1
X2	D									*	B449	NUT, PLAIN, HEXAGON: SAME AS A194	EA		2										
X2	D		5310-933-8118							*	B450	WASHER, LOCK: SAME AS A860	EA		2										
P	D		5915-910-7125							D	B451	FILTER, BAND PASS: 14304; FL0100	EA		1							4	7	3-16	1A3FL2
X2	D									*	B452	NUT, PLAIN, HEXAGON: SAME AS A194	EA		3										
X2	D		5310-933-8118							*	B453	WASHER, LOCK: SAME AS A860	EA		3										
P	D		5915-910-2870							D	B454	FILTER, BAND PASS: 14304; FL0105	EA		1							4	7	3-16	1A3FL3
X2	D									*	B455	NUT, PLAIN, HEXAGON: SAME AS A194	EA		3										

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(C) ITEM OR SYMBOL NUMBER
X2	D		5310-933-8118							*	B456 WASHER, LOCK: SAME AS A860	EA		3										
P	D		5915-910-7126							D	B457 FILTER, BAND PASS: 14304; FL0101	EA		1							4	7	3-16	1A3FL4
X2	D									*	B458 NUT, PLAIN, HEXAGON: SAME AS A194	EA		2										
X2	D		5310-933-8118							*	B459 WASHER, LOCK: SAME AS A860	EA		2										
P	D		5915-910-2872							D	B460 FILTER, BAND PASS: 14304; FL0107	EA		1							4	7	3-16	1A3FL5
X2	D									*	B461 NUT, PLAIN, HEXAGON: SAME AS A194	EA		2										
X2	D		5310-933-8118							*	B462 WASHER, LOCK: SAME AS A860	EA		2										
M	D									D	B463 PLATE, ELECTRICAL SHIELD: 14304; 162-0406	EA		1										
M	D									D	B464 PLATE, ELECTRICAL SHIELD: 14304; 162-0407	EA		1										
X2	D									D	B465 PRINTED WIRING BOARD: 14304; 162-0408	EA		1										
P	D		5905-683-2238							D	B466 RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		5									3-16	1A3R1
P	D		5905-681-8818							D	B467 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		10									3-16	1A3R2
P	D		5905-686-9994							D	B468 RESISTOR, FIXED, COMPOSITION: SAME AS A390	EA		7									3-16	1A3R3
P	D		5905-141-1183							D	B469 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF101J	EA		3							27	35	3-16	1A3R4
P	D		5905-806-0636							D	B470 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF330J	EA		2							27	35	3-16	1A3R5
P	D		5905-681-9969							D	B471 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		7									3-16	1A3R6
P	D		5905-681-8818							D	B472 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF									3-16	1A3R7
P	D		5905-686-9994							D	B473 RESISTOR, FIXED, COMPOSITION: SAME AS A390	EA		REF									3-16	1A3R8

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5905-721-1488							D	B474 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF150J	EA		1							13	14	3-16	1A3R9
P	D		5905-683-2238							D	B475 RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-16	1A3R10
P	D		5905-681-6462							D	B476 RESISTOR, FIXED, COMPOSITION: SAME AS A412	EA		2									3-16	1A3R11
P	D		5905-681-9969							D	B477 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-16	1A3R12
P	D		5905-681-8818							D	B478 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF									3-16	1A3R13
P	D		5905-723-5251							D	B479 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF222J	EA		2							59	91	3-16	1A3R14
P	D		5905-723-5251							D	B480 RESISTOR, FIXED, COMPOSITION: SAME AS B479	EA		REF									3-16	1A3R15
P	D		5905-681-9969							D	B481 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-16	1A3R16
P	D		5905-681-8818							D	B482 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF									3-16	1A3R17
P	D		5905-686-9994							D	B483 RESISTOR, FIXED, COMPOSITION: SAME AS A390	EA		REF									3-16	1A3R18
P	D		5905-802-6730							D	B484 RESISTOR, FIXED, COMPOSITION: SAME AS A580	EA		1									3-16	1A3R19
P	D		5905-683-2238							D	B485 RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-16	1A3R20
P	D		5905-686-9994							D	B486 RESISTOR, FIXED, COMPOSITION: SAME AS A390	EA		REF									3-16	1A3R21
P	D		5905-681-9969							D	B487 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-16	1A3R22
P	D		5905-681-8818							D	B488 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF									3-16	1A3R23
P	D		5905-686-9994							D	B489 RESISTOR, FIXED, COMPOSITION: SAME AS A390	EA		REF									3-16	1A3R24

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5905-683-2238							D	B490 RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-16	1A3R25
P	D		5905-681-8818							D	B491 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF									3-16	1A3R26
P	D		5905-686-9994							D	B492 RESISTOR, FIXED, COMPOSITION: SAME AS A390	EA		REF									3-16	1A3R27
P	D		5905-141-1183							D	B493 RESISTOR, FIXED, COMPOSITION: SAME AS B469	EA		REF									3-16	1A3R28
P	D		5905-806-0636							D	B494 RESISTOR, FIXED, COMPOSITION: SAME AS B470	EA		REF									3-16	1A3R29
P	D		5905-681-9969							D	B495 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-16	1A3R30
P	D		5905-681-8818							D	B496 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF									3-16	1A3R31
P	D		5905-686-9994							D	B497 RESISTOR, FIXED, COMPOSITION: SAME AS A390	EA		REF									3-16	1A3R32
P	D		5905-687-0002							D	B498 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF223J	EA		1							19	28	3-16	1A3R33
P	D		5905-683-2240							D	B499 RESISTOR, FIXED, COMPOSITION: SAME AS A380	EA		1									3-16	1A3R34
P	D		5905-681-9969							D	B500 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-16	1A3R35
P	D		5905-681-8818							D	B501 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF									3-16	1A3R36
P	D		5905-681-9969							D	B502 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-16	1A3R37
P	D		5905-681-8818							D	B503 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF									3-16	1A3R38
P	D		5905-683-7723							D	B504 RESISTOR, FIXED, COMPOSITION: SAME AS A394	EA		1									3-16	1A3R39
P	D		5905-683-2238							D	B505 RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-16	1A3R40

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD		DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5905-681-6462							D	B506	RESISTOR, FIXED, COMPOSITION: SAME AS A412	EA		REF									3-16	1A3R41
P	D		5905-681-8818							D	B507	RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF									3-16	1A3R42
P	D		5905-141-1183							D	B508	RESISTOR, FIXED, COMPOSITION: SAME AS B469	EA		REF									3-16	1A3R43
P	D		5961-556-2091							D	B509	SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		4									3-16	1A3CR1
P	D		5961-556-2091							D	B510	SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-16	1A3CR2
P	D		5961-556-2091							D	B511	SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-16	1A3CR3
P	D		5961-556-2091							D	B512	SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-16	1A3CR4
X2	D		5940-660-3759							D	B513	TERMINAL, STUD: SAME AS A430	EA		7									3-16	1A3E55
X2	D		5940-660-3759							D	B514	TERMINAL, STUD: SAME AS A430	EA		REF									3-16	1A3E56
X2	D		5940-660-3759							D	B515	TERMINAL, STUD: SAME AS A430	EA		REF									3-16	1A3E57
X2	D		5940-660-3759							D	B516	TERMINAL, STUD: SAME AS A430	EA		REF									3-16	1A3E165
X2	D		5940-660-3759							D	B517	TERMINAL, STUD: SAME AS A430	EA		REF									3-16	1A3E182
X2	D		5940-660-3759							D	B518	TERMINAL, STUD: SAME AS A430	EA		REF									3-16	1A3E183
X2	D		5940-660-3759							D	B519	TERMINAL, STUD: SAME AS A430	EA		REF									3-16	1A3E184
P	D		5950-498-2071							D	B520	TRANSFORMER, INTERMEDIATE FREQUENCY: 14304; 162-0159	EA		2							13	14	3-16	1A3T1
P	D		5950-498-2071							D	B521	TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS B520	EA		REF									3-16	1A3T2
P	D		5961-998-1920							D	B522	TRANSISTOR: SAME AS A441	EA		7									3-16	1A3Q1
P	D		5961-998-1920							D	B523	TRANSISTOR: SAME AS A441	EA		REF									3-16	1A3Q2
P	D		5961-998-1920							D	B524	TRANSISTOR: SAME AS A441	EA		REF									3-16	1A3Q3
P	D		5961-998-1920							D	B525	TRANSISTOR: SAME AS A441	EA		REF									3-16	1A3Q4

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5961-998-1920							D	B526 TRANSISTOR: SAME AS A441	EA		REF									3-16	1A3Q5
P	D		5961-998-1920							D	B527 TRANSISTOR: SAME AS A441	EA		REF									3-16	1A3Q6
P	D		5961-998-1920							D	B528 TRANSISTOR: SAME AS A441	EA		REF									3-16	1A3Q7
P	D		5961-105-9716							D	B529 TRANSISTOR: 80131; 2N2996	EA		2							27	75	3-16	1A3Q8
P	D		5961-105-9716							D	B530 TRANSISTOR: SAME AS B529	EA		REF									3-16	1A3Q9
A	F	S								C	B531 MIXER, STAGE, FREQUENCY: 14304; 162-0500	EA		1									3-18	1A4
X2	F		5305-889-3116							*	B532 SCREW, MACHINE: SAME AS A041	EA		2										
X2	F		5310-782-1349							*	B533 WASHER, FLAT: SAME AS A111	EA		2										
X2	F		5310-515-7999							*	B534 WASHER, LOCK: SAME AS A042	EA		2										
P	D		5910-401-6254							D	B535 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		16									3-18	1A4C1
P	D		5910-401-6254							D	B536 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C4
P	D		5910-401-6254							D	B537 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C8
P	D		5910-401-6254							D	B538 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C9
P	D		5910-401-6254							D	B539 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C12
P	D		5910-401-6254							D	B540 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C13
P	D		5910-401-6254							D	B541 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C16
P	D		5910-401-6254							D	B542 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C19
P	D		5910-401-6254							D	B543 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C20
P	D		5910-401-6254							D	B544 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C23

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5910-401-6254							D	B545	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C24
P	D		5910-401-6254							D	B546	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C27
P	D		5910-401-6254							D	B547	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C28
P	D		5910-401-6254							D	B548	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C34
P	D		5910-401-6254							D	B549	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C36
P	D		5910-401-6254							D	B550	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-18	1A4C37
P	D		5910-934-2865							D	B551	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		1									3-18	1A4C35
P	D		5910-900-2694							D	B552	CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15F121J500	EA		2							13	12	3-18	1A4C5
P	D		5910-889-4419							D	B553	CAPACITOR, FIXED, MICA DIELECTRIC: 81349; CM06FD621GP3	EA		1							8	6	3-18	1A4C7
P	D		5910-900-2694							D	B554	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B552	EA		REF									3-18	1A4C14
P	D									D	B555	CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15E270J500	EA		1							8	6	3-18	1A4C15
P	D		5910-064-3067							D	B556	CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15F181J500	EA		2							13	12	3-18	1A4C17
P	D		5910-064-3067							D	B557	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B556	EA		REF									3-18	1A4C18
P	D		5910-851-3328							D	B558	CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		2									3-18	1A4C21
P	D		5910-088-1245							D	B559	CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15F271J500	EA		1							13	12	3-18	1A4C22
P	D		5910-088-1629							D	B560	CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15F101J500	EA		1							13	12	3-18	1A4C29

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5910-725-7422							D	B561 CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM19F122G	EA		1							8	6	3-18	1A4C30
P	D		5910-840-9530							D	B562 CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM15F241G	EA		1							8	6	3-18	1A4C31
P	D		5910-851-3328							D	B563 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		REF									3-18	1A4C33
P	D		5910-935-6859							D	B564 CAPACITOR, FIXED; PLASTIC DIELECTRIC: 93790; WMF1D47	EA		1							33	54	3-18	1A4C2
P	D		5910-069-5344							D	B565 CAPACITOR, FIXED, PLASTIC DIELECTRIC: 93790; WMF1S15	EA		1							8	9	3-18	1A4C10
P	D		5910-051-6919							D	B566 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B426	EA		4									3-18	1A4C3
P	D		5910-051-6919							D	B567 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B426	EA		REF									3-18	1A4C11
P	D		5910-051-6919							D	B568 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B426	EA		REF									3-18	1A4C25
P	D		5910-051-6919							D	B569 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B426	EA		REF									3-18	1A4C26
P	D		5950-060-9188							D	B570 COIL, RADIO FREQUENCY: SAME AS A363	EA		1									3-18	1A4L2
P	D		5935-704-3506							D	B571 CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		6									3-18	1A4J17
P	D		5935-704-3506							D	B572 CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		REF									3-18	1A4J12
P	D		5935-704-3506							D	B573 CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		REF									3-18	1A4J13
P	D		5935-704-3506							D	B574 CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		REF									3-18	1A4J14
P	D		5935-704-3506							D	B575 CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		REF									3-18	1A4J15
P	D		[illegible]							D	B576 CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		REF									3-18	1A4J16

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
																DS			GS							
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-20	(B) 21-50	(C) 51-100	(A) 1-20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D									D	B577	CONTACT ASSEMBLY, ELECTRICAL: 91662; 02-006-111-5200	EA		1									3-18	1A4P18
P	D		5955-910-2803							D	B578	CRYSTAL UNIT, QUARTZ: 14304; Y0610	EA		1							10	4	3-18	1A4Y1
P	D		5915-910-2869							D	B579	FILTER, BAND PASS: 14304; FL0104	EA		1							4	7	3-18	1A4FL1
X2	D									*	B580	NUT, PLAIN, HEXAGON: SAME AS A194	EA		3										
X2	D		5310-933-8118							*	B581	WASHER, LOCK: SAME AS A860	EA		3										
P	D		5915-910-7128							D	B582	FILTER, BAND PASS: 14304; FL0103	EA		1							4	7	3-18	1A4FL2
X2	D									*	B583	NUT, PLAIN, HEXAGON: SAME AS A194	EA		3										
X2	D		5310-933-8118							*	B584	WASHER, LOCK: SAME AS A860	EA		3										
P	D		5915-910-7123							D	B585	FILTER, BAND PASS: 14304; FL0109	EA		1							4	7	3-18	1A4FL3
X2	D									*	B586	NUT, PLAIN, HEXAGON: SAME AS A194	EA		2										
X2	D		5310-933-8118							*	B587	WASHER, LOCK: SAME AS A860	EA		2										
X2	D		5340-832-5212							D	B588	CLIP, SPRING TENSION: 99378; 100-206-8	EA		1										
X2	D									D	B589	PRINTED WIRING BOARD: 14304; 162-0506	EA		1										
P	D		5905-681-9969							D	B590	RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		8									3-18	1A4R1
P	D		5905-683-2238							D	B591	RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		7									3-18	1A4R2
P	D		5905-683-7723							D	B592	RESISTOR, FIXED, COMPOSITION: SAME AS A394	EA		6									3-18	1A4R3
P	D		5905-683-2238							D	B593	RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-18	1A4R4
P	D		5905-727-8001							D	B594	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF681J	EA		3							18	21	3-18	1A4R5
P	D		5905-681-9969							D	B595	RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-18	1A4R6

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	D		5905-683-2238							D	B596 RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-18	1A4R7
P	D		5905-683-7723							D	B597 RESISTOR, FIXED, COMPOSITION: SAME AS A394	EA		REF									3-18	1A4R8
P	D		5905-691-0195							D	B598 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF562J	EA		1							13	14	3-18	1A4R9
P	D		5905-681-9969							D	B599 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-18	1A4R10
P	D		5905-683-2238							D	B600 RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-18	1A4R11
P	D		5905-683-7723							D	B601 RESISTOR, FIXED, COMPOSITION: SAME AS A394	EA		REF									3-18	1A4R12
P	D		5905-683-2238							D	B602 RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-18	1A4R14
P	D		5905-686-9996							D	B603 RESISTOR, FIXED, COMPOSITION: SAME AS A375	EA		1									3-18	1A4R15
P	D		5905-681-9969							D	B604 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-18	1A4R16
P	D		5905-683-2238							D	B605 RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-18	1A4R17
P	D		5905-683-7723							D	B606 RESISTOR, FIXED, COMPOSITION: SAME AS A394	EA		REF									3-18	1A4R18
P	D		5905-855-3173							D	B607 RESISTOR, FIXED, COMPOSITION: SAME AS A374	EA		4									3-18	1A4R19
P	D		5905-681-9969							D	B608 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-18	1A4R20
P	D		5905-727-8001							D	B609 RESISTOR, FIXED, COMPOSITION: SAME AS B594	EA		REF									3-18	1A4R21
P	D		5905-683-2238							D	B610 RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		REF									3-18	1A4R22
P	D		5905-683-7723							D	B611 RESISTOR, FIXED, COMPOSITION: SAME AS A394	EA		REF									3-18	1A4R23

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5905-681-9970							D	B612	RESISTOR, FIXED, COMPOSITION: SAME AS A373	EA		1								3-18	1A4R24
P	D		5905-855-3173							D	B613	RESISTOR, FIXED, COMPOSITION: SAME AS A374	EA		REF								3-18	1A4R25
P	D		5905-855-3173							D	B614	RESISTOR, FIXED, COMPOSITION: SAME AS A374	EA		REF								3-18	1A4R26
P	D		5905-681-9969							D	B615	RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF								3-18	1A4R27
P	D		5905-855-3173							D	B616	RESISTOR, FIXED, COMPOSITION: SAME AS A374	EA		REF								3-18	1A4R28
P	D		5905-683-2242							D	B617	RESISTOR, FIXED, COMPOSITION: SAME AS A376	EA		1								3-18	1A4R29
P	D		5905-687-0002							D	B618	RESISTOR, FIXED, COMPOSITION: SAME AS B498	EA		1								3-18	1A4R30
P	D		5905-727-8001							D	B619	RESISTOR, FIXED, COMPOSITION: SAME AS B594	EA		REF								3-18	1A4R31
P	D		5905-681-9969							D	B620	RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF								3-18	1A4R32
P	D		5905-681-8818							D	B621	RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		2								3-18	1A4R33
P	D		5905-683-7724							D	B622	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF242J	EA		1						8	7	3-18	1A4R34
P	D		5905-681-9969							D	B623	RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF								3-18	1A4R36
P	D		5905-681-8818							D	B624	RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF								3-18	1A4R37
P	D		5905-683-7723							D	B625	RESISTOR, FIXED, COMPOSITION: SAME AS A394	EA		REF								3-18	1A4R38
P	D		5905-682-4095							D	B626	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF162J	EA		1						8	7	3-18	1A4R39
P	D		5905-279-1686							D	B627	RESISTOR, FIXED, COMPOSITION: 81349; RC32GF560J	EA		1						8	7	3-18	1A4R40

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	D		5961-556-2091							D	B628 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		4									3-18	1A4CR1
P	D		5961-556-2091							D	B629 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-18	1A4CR2
P	D		5961-556-2091							D	B630 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-18	1A4CR3
P	D		5961-814-0768							D	B631 SEMICONDUCTOR DEVICE, DIODE: 80131; 1N3064	EA		4							53	77	3-18	1A4CR4
P	D		5961-814-0768							D	B632 SEMICONDUCTOR DEVICE, DIODE: SAME AS B631	EA		REF									3-18	1A4CR5
P	D		5961-814-0768							D	B633 SEMICONDUCTOR DEVICE, DIODE: SAME AS B631	EA		REF									3-18	1A4CR6
P	D		5961-814-0768							D	B634 SEMICONDUCTOR DEVICE, DIODE: SAME AS B631	EA		REF									3-18	1A4CR7
P	D		5961-556-2091							D	B635 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-18	1A4CR8
P	D		5961-767-9412							D	B636 SEMICONDUCTOR DEVICE, DIODE: 12969; UZ709	EA		1							18	45	3-18	1A4CR9
P	D		5950-498-2069							D	B637 TRANSFORMER, INTERMEDIATE FREQUENCY: 14304; 162-0158	EA		2							18	45	3-18	1A4T1
P	D		5950-498-2072							D	B638 TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS A431	EA		2									3-18	1A4T2
P	D		5950-498-2072							D	B639 TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS A431	EA		REF									3-18	1A4T3
P	D		5950-498-2069							D	B640 TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS B637	EA		REF									3-18	1A4T4
P	D		5961-998-1920							D	B641 TRANSISTOR: SAME AS A441	EA		4									3-18	1A4Q1
P	D		5961-998-1920							D	B642 TRANSISTOR: SAME AS A441	EA		REF									3-18	1A4Q2
P	D		5961-998-1920							D	B643 TRANSISTOR: SAME AS A441	EA		REF									3-18	1A4Q3
P	D		5961-901-4862							D	B644 TRANSISTOR: SAME AS A312	EA		2									3-18	1A4Q4

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5961-901-4862							D	B645 TRANSISTOR: SAME AS A312	EA		REF									3-18	1A4Q5
P	D		5961-998-1920							D	B646 TRANSISTOR: SAME AS A441	EA		REF									3-18	1A4Q6
P	D		5961-752-6119							D	B647 TRANSISTOR: SAME AS A438	EA		1									3-18	1A4Q7
A	F	S								C	B648 MIXER, STAGE, FREQUENCY: 14304; 162-0800	EA		1									3-26	1A8
X2	F		5305-889-3116							*	B649 SCREW, MACHINE: SAME AS A041	EA		2										
X2	F		5310-782-1349							*	B650 WASHER, FLAT: SAME AS A111	EA		2										
X2	F		5310-515-7999							*	B651 WASHER, LOCK: SAME AS A042	EA		2										
P	D		5910-401-6254							D	B652 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		8									3-26	1A8C19
P	D		5910-401-6254							D	B653 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-26	1A8C20
P	D		5910-401-6254							D	B654 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-26	1A8C22
P	D		5910-993-3118							D	B655 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; DA203	EA		1							8	6	3-26	1A8C36
P	D		5910-401-6254							D	B656 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-26	1A8C42
P	D		5910-270-9083							D	B657 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A635	EA		2									3-26	1A8C44
P	D		5910-683-3008							D	B658 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A633	EA		2									3-26	1A8C45
P	D		5910-401-6254							D	B659 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-26	1A8C50
P	D		5910-401-6254							D	B660 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-26	1A8C52
P	D		5910-225-7331							D	B661 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A289	EA		1									3-26	1A8C53
P	D		5910-270-9083							D	B662 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A635	EA		REF									3-26	1A8C56

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5910-064-3894							D	B663 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 12574; SSM01-88	EA		1							8	6	3-26	1A8C57
P	D		5910-401-6254							D	B664 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-26	1A8C66
P	D		5910-401-6254							D	B665 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-26	1A8C68
P	D		5910-683-3008							D	B666 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A633	EA		REF									3-26	1A8C69
P	D		5910-934-2865							D	B667 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		9									3-26	1A8C23
P	D									D	B668 CAPACITOR, FIXED, ELECTROLYTIC: 05079; S33-20C3MI	EA		2							13	16	3-26	1A8C24
P	D		5910-934-2865							D	B669 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-26	1A8C25
P	D		5910-934-2865							D	B670 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-26	1A8C26
P	D		5910-934-2865							D	B671 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-26	1A8C30
P	D									D	B672 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS B668	EA		REF									3-26	1A8C31
P	D		5910-934-2865							D	B673 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-26	1A8C32
P	D		5910-934-2865							D	B674 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-26	1A8C33
P	D		5910-934-2865							D	B675 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-26	1A8C34
P	D		5910-934-2865							D	B676 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-26	1A8C35
P	D		5910-934-2865							D	B677 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-26	1A8C37
P	D		5910-926-0784							D	B678 CAPACITOR, FIXED, ELECTROLYTIC: 05079; S68-15C3MI	EA		1							8	8	3-26	1A8C39

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	(2) MODEL 1	2	3	4	5	6	(2) IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	D		5910-985-4334							D	B679 CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM15F681G	EA		1							8	6	3-26	1A8C21
P	D		5910-851-3328							D	B680 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		6									3-26	1A8C41
P	D		5910-852-9695							D	B681 CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM15E750G	EA		1							8	6	3-26	1A8C59
P	D		5910-578-5758							D	B682 CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM15F121G	EA		1							8	6	3-26	1A8C60
P	D		5910-851-3328							D	B683 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		REF									3-26	1A8C61
P	D		5910-851-3328							D	B684 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		REF									3-26	1A8C62
P	D		5910-851-3328							D	B685 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		REF									3-26	1A8C63
P	D		5910-851-3328							D	B686 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		REF									3-26	1A8C64
P	D		5910-851-3328							D	B687 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		REF									3-26	1A8C67
P	D		5910-987-3594							D	B688 CAPACITOR, FIXED, PAPER DIELECTRIC: 02777; P22P5D	EA		2							27	45	3-26	1A8C51
P	D		5910-987-3594							D	B689 CAPACITOR, FIXED, PAPER DIELECTRIC: SAME AS B688	EA		REF									3-26	1A8C65
P	D		5910-935-6859							D	B690 CAPACITOR, FIXED, PLASTIC DIELECTRIC: SAME AS B564	EA		3									3-26	1A8C27
P	D		5910-935-6859							D	B691 CAPACITOR, FIXED, PLASTIC DIELECTRIC: SAME AS B564	EA		REF									3-26	1A8C28
P	D		5910-935-6859							D	B692 CAPACITOR, FIXED, PLASTIC DIELECTRIC: SAME AS B564	EA		REF									3-26	1A8C29
P	D		5910-928-1332							D	B693 CAPACITOR, VARIABLE, GLASS DIELECTRIC: 73899; NVC43GW	EA		1							8	4	3-26	1A8C58
P	D		5950-060-9188							D	B694 COIL, RADIO FREQUENCY: SAME AS A363	EA		1									3-26	1A8L2

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
				MODEL											DS			GS						
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1 - 20	(B) 21-50	(C) 51-100	(A) 1-20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5935-910-4624							D	B695 CONNECTOR, PLUG, ELECTRICAL: 11453; 6040-23P1010	EA		1							8	14	3-26	1A8P23
X2	D									*	B696 NUT, PLAIN, HEXAGON: SAME AS A194	EA		2										
X2	D		5310-933-8118							*	B697 WASHER, LOCK: SAME AS A860	EA		2										
P	D		5935-704-3506							D	B698 CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		2									3-26	1A8J24
P	D		5935-704-3506							D	B699 CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		REF									3-26	1A8J25
X2	D									D	B700 PRINTED WIRING BOARD: 14304; 162-0806	EA		1										
P	D		5905-681-6462							D	B701 RESISTOR, FIXED, COMPOSITION: SAME AS A412	EA		1									3-26	1A8R1
P	D		5905-681-9969							D	B702 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		6									3-26	1A8R17
P	D		5905-683-7723							D	B703 RESISTOR, FIXED, COMPOSITION: SAME AS A394	EA		3									3-26	1A8R18
P	D		5905-683-7723							D	B704 RESISTOR, FIXED, COMPOSITION: SAME AS A394	EA		REF									3-26	1A8R19
P	D		5905-855-3173							D	B705 RESISTOR, FIXED, COMPOSITION: SAME AS A374	EA		2									3-26	1A8R20
P	D		5905-723-5251							D	B706 RESISTOR, FIXED, COMPOSITION: SAME AS	EA		3									3-26	1A8R21
P	D		5905-681-9969							D	B707 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-26	1A8R22
P	D		5905-686-9996							D	B708 RESISTOR, FIXED, COMPOSITION: SAME AS A375	EA		1									3-26	1A8R23
P	D		5905-683-7723							D	B709 RESISTOR, FIXED, COMPOSITION: SAME AS A394	EA		REF									3-26	1A8R24
P	D		5905-681-8818							D	B710 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		4									3-26	1A8R25
P	D		5905-682-4109							D	B711 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF561J	EA		3							18	21	3-26	1A8R26

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5905-806-0636							D	B712 RESISTOR, FIXED, COMPOSITION: SAME AS B470	EA		3									3-26	1A8R27
P	D		5905-681-8818							D	B713 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF									3-26	1A8R28
P	D		5905-681-8818							D	B714 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF									3-26	1A8R29
P	D		5905-681-8818							D	B715 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF									3-26	1A8R31
P	D		5905-800-0179							D	B716 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF563J	EA		1							8	7	3-26	1A8R32
P	D		5905-686-3798							D	B717 RESISTOR, FIXED, COMPOSITION: SAME AS A389	EA		3									3-26	1A8R33
P	D		5905-855-3173							D	B718 RESISTOR, FIXED, COMPOSITION: SAME AS A374	EA		REF									3-26	1A8R34
P	D		5905-688-3738							D	B719 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF182J	EA		2							18	21	3-26	1A8R35
P	D		5905-691-0195							D	B720 RESISTOR, FIXED, COMPOSITION: SAME AS B598	EA		1									3-26	1A8R36
P	D		5905-681-9969							D	B721 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-26	1A8R37
P	D		5905-681-9970							D	B722 RESISTOR, FIXED, COMPOSITION: SAME AS A373	EA		1									3-26	1A8R38
P	D		5905-723-5251							D	B723 RESISTOR, FIXED, COMPOSITION: SAME AS B479	EA		REF									3-26	1A8R39
P	D		5905-806-0636							D	B724 RESISTOR, FIXED, COMPOSITION: SAME AS B470	EA		REF									3-26	1A8R40
P	D		5905-682-4109							D	B725 RESISTOR, FIXED, COMPOSITION: SAME AS B711	EA		REF									3-26	1A8R41
P	D		5905-681-9969							D	B726 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-26	1A8R42
P	D		5905-682-4109							D	B727 RESISTOR, FIXED, COMPOSITION: SAME AS B711	EA		REF									3-26	1A8R43

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5905-688-3738							D	B728 RESISTOR, FIXED, COMPOSITION: SAME AS B719	EA		REF									3-26	1A8R44
P	D		5905-687-0002							D	B729 RESISTOR, FIXED, COMPOSITION: SAME AS B498	EA		1									3-26	1A8R45
P	D		5905-806-0636							D	B730 RESISTOR, FIXED, COMPOSITION: SAME AS B470	EA		REF									3-26	1A8R46
P	D		5905-279-1734							D	B731 RESISTOR, FIXED, COMPOSITION: 81349; RC32GF330J	EA		1							13	14	3-26	1A8R47
P	D		5905-681-9969							D	B732 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-26	1A8R48
P	D		5905-686-3798							D	B733 RESISTOR, FIXED, COMPOSITION: SAME AS A389	EA		REF									3-26	1A8R50
P	D		5905-682-4098							D	B734 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF392J	EA		1							13	14	3-26	1A8R51
P	D		5905-721-1488							D	B735 RESISTOR, FIXED, COMPOSITION: SAME AS B474	EA		1									3-26	1A8R52
P	D		5905-279-2643							D	B736 RESISTOR, FIXED, COMPOSITION: 81349; RC32GF101J	EA		1							8	7	3-26	1A8R53
P	D		5905-723-5251							D	B737 RESISTOR, FIXED, COMPOSITION: SAME AS B479	EA		REF									3-26	1A8R67
P	D		5905-725-6995							D	B738 RESISTOR, FIXED, COMPOSITION: SAME AS A401	EA		1									3-26	1A8R68
P	D		5905-686-9994							D	B739 RESISTOR, FIXED, COMPOSITION: SAME AS A390	EA		1									3-26	1A8R69
P	D		5905-681-9969							D	B740 RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-26	1A8R70
P	D		5905-686-3798							D	B741 RESISTOR, FIXED, COMPOSITION: SAME AS A389	EA		REF									3-26	1A8R71
P	D		5905-988-2310							D	B742 RESISTOR, FIXED, FILM: 90201; MAF60A1000F	EA		6							33	42	3-26	1A8R54
P	D		5905-988-2310							D	B743 RESISTOR, FIXED, FILM: SAME AS B742	EA		REF									3-26	1A8R55

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5905-965-5554							D	B744 RESISTOR, FIXED, FILM: 90201; MAF60A6810F	EA		2							13	14	3-26	1A8R57
P	D		5905-965-5554							D	B745 RESISTOR, FIXED, FILM: SAME AS B744	EA		REF									3-26	1A8R58
P	D		5905-988-2310					*		D	B746 RESISTOR, FIXED, FILM: SAME AS B742	EA		REF									3-26	1A8R59
P	D		5905-988-2310							D	B747 RESISTOR, FIXED, FILM: SAME AS B742	EA		REF									3-26	1A8R60
P	D		5905-988-2310							D	B748 RESISTOR, FIXED, FILM: SAME AS B742	EA		REF									3-26	1A8R61
P	D		5905-988-2310							D	B749 RESISTOR, FIXED, FILM: SAME AS B742	EA		REF									3-26	1A8R62
P	D		5905-887-2108							D	B750 RESISTOR, FIXED, FILM: 90201; MAF60A2210F	EA		2							13	14	3-26	1A8R63
P	D		5905-887-2108							D	B751 RESISTOR, FIXED, FILM: SAME AS B750	EA		REF									3-26	1A8R64
P	D		5905-897-2119							D	B752 RESISTOR, FIXED, FILM: 90201; MAF60A5621F	EA		2							13	14	3-26	1A8R65
P	D		5905-897-2119							D	B753 RESISTOR, FIXED, FILM: SAME AS B752	EA		REF									3-26	1A8R66
P	D		5905-759-3531							D	B754 RESISTOR, THERMAL: 15801; JB31J1	EA		1							8	5	3-26	1A8R30
P	D		5905-887-6057							D	B755 RESISTOR, VARIABIE: 96791; 2901WR501	EA		1							8	8	3-26	1A8R56
P	D		5961-556-2091							D	B756 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		6									3-26	1A8CR2
P	D		5961-556-2091							D	B757 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-26	1A8CR3
P	D		5961-556-2091							D	B758 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-26	1A8CR4
P	D		5961-556-2091							D	B759 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-26	1A8CR5
P	D		5961-814-0768							D	B760 SEMICONDUCTOR DEVICE, DIODE: SAME AS B631	EA		6									3-26	1A8CR6
P	D		5961-556-2091							D	B761 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-26	1A8CR7
P	D		5961-556-2091							D	B762 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-26	1A8CR8

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5961-767-9412							D	B763	SEMICONDUCTOR DEVICE, DIODE: SAME AS B636	EA		1									3-26	1A8CR9
P	D		5961-814-0768							D	B764	SEMICONDUCTOR DEVICE, DIODE: SAME AS B631	EA		REF									3-26	1A8CR10
P	D		5961-814-0768							D	B765	SEMICONDUCTOR DEVICE, DIODE: SAME AS B631	EA		REF									3-26	1A8CR11
P	D		5961-814-0768							D	B766	SEMICONDUCTOR DEVICE, DIODE: SAME AS B631	EA		REF									3-26	1A8CR12
P	D		5961-814-0768							D	B767	SEMICONDUCTOR DEVICE, DIODE: SAME AS B631	EA		REF									3-26	1A8CR13
P	D		5961-814-0768							D	B768	SEMICONDUCTOR DEVICE, DIODE: SAME AS B631	EA		REF									3-26	1A8CR14
P	D		5950-910-2790							D	B769	TRANSFORMER, AUDIO FREQUENCY: 14304; 162-0811	EA		2							13	14	3-26	1A8T3
P	D		5950-910-2790							D	B770	TRANSFORMER, AUDIO FREQUENCY: SAME AS B769	EA		REF									3-26	1A8T5
P	D		5950-498-2072							D	B771	TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS A431	EA		3									3-26	1A8T6
P	D		5950-498-2072							D	B772	TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS A431	EA		REF									3-26	1A8T7
P	D		5950-498-2072							D	B773	TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS A431	EA		REF									3-26	1A8T8
P	D		5950-486-8597							D	B774	TRANSFORMER, INTERMEDIATE FREQUENCY: 14304; 162-0165	EA		1							8	7	3-26	1A8L4
P	D		5961-998-1920							D	B775	TRANSISTOR: SAME AS A441	EA		1									3-26	1A8Q3
P	D		5961-883-5305							D	B776	TRANSISTOR: 80131; 2N652	EA		4							19	60	3-26	1A8Q4
P	D		5961-912-9008							D	B777	TRANSISTOR: 07263; 2N3638A	EA		1							19	60	3-26	1A8Q5
P	D		5961-883-5305							D	B778	TRANSISTOR: SAME AS B776	EA		REF									3-26	1A8Q6
P	D		5961-883-5305							D	B779	TRANSISTOR: SAME AS B776	EA		REF									3-26	1A8Q7
P	D		5961-883-5305							D	B780	TRANSISTOR: SAME AS B776	EA		REF									3-26	1A8Q8

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5961-901-4862							D	B781 TRANSISTOR: SAME AS A312	EA		2									3-26	1A8Q9
P	D		5961-901-4862							D	B782 TRANSISTOR: SAME AS A312	EA		REF									3-26	1A8Q10
A	F	S								C	B784 OSCILLATOR, RADIO FREQUENCY: 14304; 162-0901	EA		1									3-28	1A9
X2	F		5305-889-3116							*	B785 SCREW, MACHINE: SAME AS A041	EA		2										
X2	F									*	B786 WASHER, FLAT: SAME AS A623	EA		2										
X2	F		5310-515-7999							*	B787 WASHER, LOCK: SAME AS A042	EA		2										
P	D		5910-401-6254							D	B788 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		4									3-28	1A9C2
P	D		5910-401-6254							D	B789 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-28	1A9C5
P	D		5910-401-6254							D	B790 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-28	1A9C7
P	D		5910-401-6254							D	B791 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-28	1A9C9
P	D									D	B792 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 72982; 811-000S2H0101G	EA		1							8	6	3-28	1A9C12
P	D		5910-934-2865							D	B793 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		1									3-28	1A9C6
P	D									D	B794 CAPACITOR, FIXED, GLASS DIELECTRIC: 95275; VY13C191G	EA		1							8	6	3-28	1A9C3
P	D		5910-730-3003							D	B795 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD30F822J500	EA		1							8	6	3-28	1A9C4
P	D		5910-061-7442							D	B796 CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM15F431G	EA		1							8	6	3-28	1A9C11
P	D		5910-935-6859							D	B797 CAPACITOR, FIXED, PLASTIC DIELECTRIC: SAME AS B564	EA		2									3-28	1A9C8
P	D		5910-935-6859							D	B798 CAPACITOR, FIXED, PLASTIC DIELECTRIC: SAME AS B564	EA		REF									3-28	1A9C10

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	(3) MODEL 1	2	3	4	5	6	IND CD		(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	D		5910-905-7001							D	B799	CAPACITOR, VARIABLE, GLASS DIELECTRIC: 73899; VC32GWY	EA		1							8	4	3-28	1A9C1
P	D		5950-941-6194							D	B800	COIL, RADIO FREQUENCY: 99800; DSV402-1	EA		1							8	6	3-28	1A9L1
P	D									D	B801	CONTACT ASSEMBLY, ELECTRICAL: 91662; 02-005-111-5200	EA		1							8	4	3-28	1A9J40
X2	D									D	B802	PRINTED WIRING BOARD: 14304; 162-0907	EA		1									3-28	
P	D		5905-681-6462							D	B803	RESISTOR, FIXED, COMPOSITION: SAME AS A412	EA		4									3-28	1A9R1
P	D		5905-681-6462							D	B804	RESISTOR, FIXED, COMPOSITION: SAME AS A412	EA		REF									3-28	1A9R2
P	D		5905-681-9969							D	B805	RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		3									3-28	1A9R3
P	D		5905-686-3798							D	B806	RESISTOR, FIXED, COMPOSITION: SAME AS A389	EA		1									3-28	1A9R4
P	D		5905-723-5251							D	B807	RESISTOR, FIXED, COMPOSITION: SAME AS B807	EA		1									3-28	1A9R5
P	D		5905-141-1183							D	B808	RESISTOR, FIXED, COMPOSITION: SAME AS B469	EA		2									3-28	1A9R6
P	D		5905-681-9969							D	B809	RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-28	1A9R8
P	D		5905-681-8818							D	B810	RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		2									3-28	1A9R9
P	D		5905-681-6462							D	B811	RESISTOR, FIXED, COMPOSITION: SAME AS A412	EA		REF									3-28	1A9R10
P	D		5905-141-1183							D	B812	RESISTOR, FIXED, COMPOSITION: SAME AS B469	EA		REF									3-28	1A9R11
P	D		5905-68:-2240							D	B813	RESISTOR, FIXED, COMPOSITION: SAME AS A380	EA		1									3-28	1A9R12
P	D		5905-681-9969							D	B814	RESISTOR, FIXED, COMPOSITION: SAME AS A388	EA		REF									3-28	1A9R13

(1) (A) SOURCE CD	(1) (B) MAINT CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	D		5905-681-8818							D	B815 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		REF									3-28	1A9R14
P	D		5905-681-6462							D	B816 RESISTOR, FIXED, COMPOSITION: SAME AS A412	EA		REF									3-28	1A9R15
P	D		5905-820-9124							D	B817 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF390J	EA		1							8	7	3-28	1A9R16
P	D		5905-683-2235							D	B818 RESISTOR, FIXED, COMPOSITION: SAME AS A408	EA		1									3-28	1A9R17
P	D		5905-682-4098							D	B819 RESISTOR, FIXED, COMPOSITION: SAME AS B734	EA		1									3-28	1A9R18
P	D		5905-903-0772							D	B820 RESISTOR, VARIABLE: SAME AS A422	EA		1									3-28	1A9R7
P	D		5961-225-9616							D	B821 SEMICONDUCTOR DEVICE, DIODE: 04713; 1N4737A	EA		1							8	15	3-28	1A9CR1
P	D		5950-498-2074							D	B822 TRANSFORMER, INTERMEDIATE FREQUENCY: 14304; 162-0163	EA		1							8	7	3-28	1A9L2
P	D		5950-498-2069							D	B823 TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS B637	EA		1									3-28	1A9T1
P	D		5961-998-1920							D	B824 TRANSISTOR: SAME AS A441	EA		4									3-28	1A9Q1
P	D		5961-998-1920							D	B825 TRANSISTOR: SAME AS A441	EA		REF									3-28	1A9Q2
P	D		5961-998-1920							D	B826 TRANSISTOR: SAME AS A441	EA		REF									3-28	1A9Q3
P	D		5961-998-1920							D	B827 TRANSISTOR: SAME AS A441	EA		REF									3-28	1A9Q4
P	F	S	5820-179-3761							C	B828 OSCILLATOR, RADIO FREQUENCY: 14304; 162-1000	EA		1							59	3	3-30	1A10
M	D									D	B829 BRACKET, ANGLE: SAME AS A902	EA		2									3-31	11
X2	F		5305-993-0190							*	B830 SCREW, MACHINE: SAME AS A139	EA		1									3-31	7
X2	F		5310-515-7999							*	B831 WASHER, LOCK: SAME AS A042	EA		1									3-31	10
M	D									D	B832 BRACKET, ANGLE: SAME AS A902	EA		REF									3-31	11
X2	F		5305-983-6730							*	B833 SCREW, MACHINE: 96906; MS35206-218	EA		1									3-31	6

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1 - 20	DS (B) 21-50	DS (C) 51-100	GS (A) 1 - 20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
X2	F		5310-515-7999							*	B834 WASHER, LOCK: SAME AS A042	EA		1									3-31	10
P	D		5910-401-6254							D	B835 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		3									3-30	1A10C7
P	D		5910-401-6254							D	B836 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-30	1A10C11
P	D		5910-401-6254							D	B837 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-30	1A10C12
P	D		5910-992-5017							D	B838 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15E300J500	EA		1							8	6	3-30	1A10C6
P	D		5910-938-7441							D	B839 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD19F112J500	EA		1							8	6	3-30	1A10C8
P	D		5910-984-2174							D	B840 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15E680J500	EA		1							13	12	3-30	1A10C10
P	D		5910-992-5018							D	B841 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15E360J500	EA		1							8	6	3-30	1A10C13
P	D		5910-987-3594							D	B842 CAPACITOR, FIXED, PAPER DIELECTRIC: SAME AS B688	EA		1									3-30	1A10C9
P	D		5910-998-1621							D	B843 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: 72982; 538-006B2P093R	EA		4							19	16	3-30	1A10C1
P	D		5910-998-1621							D	B844 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B843	EA		REF									3-30	1A10C2
P	D		5910-998-1621							D	B845 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B843	EA		REF									3-30	1A10C3
P	D		5910-998-1621							D	B846 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B843	EA		REF									3-30	1A10C4
P	D		5910-910-4163							D	B847 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: 72982; 538-006B2P090R	EA		1							8	4	3-30	1A10C5
P	D		5950-905-1839							D	B848 COIL, RADIO FREQUENCY: 99800; 1537-48	EA		1							8	6	3-30	1A10L1
P	D		5950-088-1720							D	B849 COIL, RADIO FREQUENCY: SAME AS A366	EA		1									3-30	1A10L2
P	D		5955-910-2878							D	B850 CRYSTAL UNIT, QUARTZ: 14304; Y0450	EA		1							10	4	3-30	1A10Y1
P	D		5955-910-2879							D	B851 CRYSTAL UNIT, QUARTZ: 14304; Y0451	EA		1							10	4	3-30	1A10Y2

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5955-910-2880							D	B852 CRYSTAL UNIT, QUARTZ: 14304; YO452	EA		1							10	4	3-30	1A10Y3
P	D		5955-910-2883							D	B853 CRYSTAL UNIT, QUARTZ: 14304; YO455	EA		1							10	4	3-30	1A10Y4
P	D		5955-910-4118							D	B854 CRYSTAL UNIT, QUARTZ: 14304; YO464	EA		1							10	4	3-30	1A10Y5
P	D		5955-910-2801							D	B855 CRYSTAL UNIT, QUARTZ: 14304; YO465	EA		1							10	4	3-30	1A10Y6
P	D		5955-910-4119							D	B856 CRYSTAL UNIT, QUARTZ: 14304; YO466	EA		1							10	4	3-30	1A10Y7
P	D		5955-910-4120							D	B857 CRYSTAL UNIT, QUARTZ: 14304; YO467	EA		1							10	4	3-30	1A10Y8
P	D		5955-910-4121							D	B858 CRYSTAL UNIT, QUARTZ: 14304; YO468	EA		1							10	4	3-30	1A10Y9
P	D		5955-910-8240							D	B859 CRYSTAL UNIT, QUARTZ: 14304; YO469	EA		1							10	4	3-30	1A10Y10
P	D		5955-910-8238							D	B860 CRYSTAL UNIT, QUARTZ: 14304; YO470	EA		1							10	4	3-30	1A10Y11
P	D		5955-910-4123							D	B861 CRYSTAL UNIT, QUARTZ: 14304; YO471	EA		1							10	4	3-30	1A10Y12
P	D		5955-910-4124							D	B862 CRYSTAL UNIT, QUARTZ: 14304; YO472	EA		1							10	4	3-30	1A10Y13
X2	D									D	B863 HOLDER, CRYSTAL UNIT: 14304; 162-1004	EA		1									3-31	14
X2	D									D	B864 PLATE, MOUNTING, SWITCH: 14304; 162-1007	EA		1									3-31	21
X2	D		5305-993-0190							*	B865 SCREW, MACHINE: SAME AS A139	EA		4									3-31	17
X2	D									*	B866 WASHER, FLAT: SAME AS A623	EA		4									3-31	19
X2	D		5310-515-7999							*	B867 WASHER, LOCK: SAME AS A042	EA		4									3-31	18
X2	D									D	B868 PRINTED WIRING BOARD: 14304; 162-1024	EA		1									3-31	13
X2	D		5305-983-6730							*	B869 SCREW, MACHINE: SAME AS B833	EA		2									3-31	5
X2	D									*	B870 WASHER, FLAT: SAME AS A623	EA		2									3-31	9
X2	D		5310-515-7999							*	B871 WASHER, LOCK: SAME AS A042	EA		2									3-31	8
P	D		5905-279-2616							D	B872 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF153J	EA		2							40	49	3-30	1A10R1
P	D		5905-276-2616							D	B873 RESISTOR, FIXED, COMPOSITION: SAME AS B872	EA		REF									3-30	1A10R2

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	D		5905-279-1876							D	B874 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF222J	EA		1							13	42	3-30	1A1OR3
P	D		5905-195-6791							D	B875 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF681J	EA		1							19	28	3-30	1A1OR4
P	D		5905-192-3973							D	B876 RESISTOR, FIXED, COMPOSITION: SAME AS A306	EA		1									3-30	1A1OR5
P	D		5905-279-3502							D	B877 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF123J	EA		2							19	28	3-30	1A1OR6
P	D		5905-279-3502							D	B878 RESISTOR, FIXED, COMPOSITION: SAME AS B877	EA		REF									3-30	1A1OR7
P	D		5905-190-8883							D	B879 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF100J	EA		1							18	21	3-30	1A1OR8
P	D		5905-252-5434							D	B880 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF121J	EA		1							8	7	3-30	1A1OR9
P	D		5905-190-8889							D	B881 RESISTOR, FIXED, COMPOSITION: SAME AS A304	EA		1									3-30	1A1OR10
P	D		5905-195-6800							D	B882 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF561J	EA		1							19	28	3-30	1A1OR11
X2	D									D	B883 SPACER, SLEEVE: 14304; H4342	EA		3									3-31	12
X2	D									D	B884 SPACER, SLEEVE: SAME AS B883	EA		REF									3-31	12
X2	D									D	B885 SPACER, SLEEVE: SAME AS B883	EA		REF									3-31	12
X2	D									D	B886 SPACER, SLEEVE: 14304; H4600	EA		4									3-31	20
X2	D									D	B887 SPACER, SLEEVE: SAME AS B886	EA		REF									3-31	20
X2	D									D	B888 SPACER, SLEEVE: SAME AS B886	EA		REF									3-31	20
X2	D									D	B889 SPACER, SLEEVE: SAME AS B886	EA		REF									3-31	20
X2	D									D	B890 SPACER, SLEEVE: 14304; H4705	EA		1									3-31	15
P	D		5940-910-4188							D	B891 SWITCH, ROTARY: 14304; 162-1003	EA		1							8	15	3-31	51
X2	D		5940-660-3759							D	B892 TERMINAL, STUD: SAME AS A430	EA		6									3-30	1A1OE8

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
X2	D		5940-660-3759							D	B893 TERMINAL, STUD: SAME AS A430	EA		REF									3-30	1A10E9
X2	D		5940-660-3759							D	B894 TERMINAL, STUD: SAME AS A430	EA		REF									3-30	1A10E10
X2	D		5940-660-3759							D	B895 TERMINAL, STUD: SAME AS A430	EA		REF									3-30	1A10E11
X2	D		5940-660-3759							D	B896 TERMINAL, STUD: SAME AS A430	EA		REF									3-30	1A10E12
X2	D		5940-660-3759							D	B897 TERMINAL, STUD: SAME AS A430	EA		REF									3-30	1A10E13
P	D		5961-998-1920							D	B898 TRANSISTOR: SAME AS A441	EA		1									3-30	1A10Q1
P	D		5961-842-6937							D	B899 TRANSISTOR: 16736; 2N706	EA		1							40	135	3-30	1A10Q2
P	F	R	5820-135-0382							C	B900 OSCILLATOR, RADIO FREQUENCY: 14304; 162-1100	EA		1	2	3	5	2	2	2	53	3	3-33	1A11
P	D		5910-401-6254							D	B901 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		3									3-33	1A11C5
P	D		5910-401-6254							D	B902 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-33	1A11C6
P	D		5910-401-6254							D	B903 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-33	1A11C8
P	D		5910-088-1245							D	B904 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B559	EA		1									3-33	1A11C1
P	D									D	B905 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15F820J500	EA		1							13	12	3-33	1A11C?
P	D		5910-725-8940							D	B906 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15E330J500	EA		2							13	12	3-33	1A11C4
P	D		5910-725-8940							D	B907 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B906	EA		REF									3-33	1A11C7
P	D		5910-851-3328							D	B908 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		1									3-33	1A11C9
P	D		5910-890-8996							D	B909 CAPACITOR, FIXED, MICA DIELECTRIC: 72136; DM15F102G	EA		1							8	6	3-33	1A11C10
P	D		5910-051-6919							D	B910 CAPACITOR, VARIABLE CERAMIC DIELECTRIC: SAME AS B426	EA		1									3-33	1A11C3

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	D		5950-088-1720							D	B911 COIL, RADIO FREQUENCY: SAME AS A366	EA		1									3-33	1A11L1
P	D		5950-683-3989							D	B912 COIL, RADIO FREQUENCY: 99800; 1537-12	EA		1							8	6	3-33	1A11L2
P	D		5955-910-2881							D	B913 CRYSTAL UNIT, QUARTZ: 14304; Y0453	EA		1							10	4	3-33	1A11Y1
P	D		5955-910-2882							D	B914 CRYSTAL UNIT, QUARTZ: 14304; Y0454	EA		1							10	4	3-33	1A11Y2
P	D		5955-910-2884							D	B915 CRYSTAL UNIT, QUARTZ: 14304; Y0456	EA		1							10	4	3-33	1A11Y3
P	D		5955-910-2885							D	B916 CRYSTAL UNIT, QUARTZ: 14304; Y0457	EA		1							10	4	3-33	1A11Y4
P	D		5955-910-2886							D	B917 CRYSTAL UNIT, QUARTZ: 14304; Y0458	EA		1							10	4	3-33	1A11Y5
P	D		5955-910-2887							D	B918 CRYSTAL UNIT, QUARTZ: 14304; Y0459	EA		1							10	4	3-33	1A11Y6
P	D		5955-910-2888							D	B919 CRYSTAL UNIT, QUARTZ: 14304; Y0460	EA		1							10	4	3-33	1A11Y7
P	D		5955-910-4115							D	B920 CRYSTAL UNIT, QUARTZ: 14304; Y0461	EA		1							10	4	3-33	1A11Y8
P	D		5955-910-4116							D	B921 CRYSTAL UNIT, QUARTZ: 14304; Y0462	EA		1							10	4	3-33	1A11Y9
P	D		5955-910-4117							D	B922 CRYSTAL UNIT, QUARTZ: 14304; Y0463	EA		1							10	4	3-33	1A11Y10
X2	D									D	B923 HOLDER, CRYSTAL UNIT: 14304; 162-1107	EA		1									3-34	9
X2	D									D	B924 PLATE, MOUNTING, SWITCH: 14304; 162-1106	EA		1									3-34	21
X2	D		5305-993-0190							*	B925 SCREW, MACHINE: SAME AS A139	EA		4									3-34	11
X2	D									*	B926 WASHER, FLAT: SAME AS A623	EA		4									3-34	13
X2	D		5310-515-7999							*	B927 WASHER, LOCK: SAME AS A042	EA		4									3-34	12
X2	D									D	B928 PRINTED, WIRING BOARD: 14304; 162-1126	EA		1									3-34	7
X2	D		5305-993-0190							*	B929 SCREW, MACHINE: SAME AS A139	EA		1									3-34	1
X2	D		5305-983-6730							*	B930 SCREW, MACHINE: SAME AS B833	EA		3									3-34	2
X2	D									*	B931 WASHER, FLAT: SAME AS A623	EA		3									3-34	4
X2	D		5310-515-7999							*	B932 WASHER, LOCK: SAME AS A042	EA		4									3-34	3

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5905-279-2616							D	B933 RESISTOR, FIXED, COMPOSITION: SAME AS B872	EA		2									3-33	1A11R1
P	D		5905-279-1876							D	B934 RESISTOR, FIXED, COMPOSITION: SAME AS B874	EA		1									3-33	1A11R2
P	D		5905-279-3502							D	B935 RESISTOR, FIXED, COMPOSITION: SAME AS B877	EA		2									3-33	1A11R3
P	D		5905-190-8883							D	B936 RESISTOR, FIXED, COMPOSITION: SAME AS B879	EA		1									3-33	1A11R4
P	D		5905-279-1890							D	B937 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF391J	EA		1							13	14	3-33	1A11R5
P	D		5905-279-3502							D	B938 RESISTOR, FIXED, COMPOSITION: SAME AS B877	EA		REF									3-33	1A11R6
P	D		5905-192-3973							D	B939 RESISTOR, FIXED, COMPOSITION: SAME AS A306	EA		2									3-33	1A11R7
P	D		5905-192-3973							D	B940 RESISTOR, FIXED, COMPOSITION: SAME AS A306	EA		REF									3-33	1A11R8
P	D		5905-279-2616							D	B941 RESISTOR, FIXED, COMPOSITION: SAME AS B872	EA		REF									3-33	1A11R9
P	D		5905-171-2006							D	B942 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF271J	EA		1							18	21	3-33	1A11R10
P	D		5905-279-3513							D	B943 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF221J	EA		1							19	28	3-33	1A11R11
X2	D									D	B944 SPACER, SLEEVE: SAME AS B883	EA		3									3-34	6
X2	D									D	B945 SPACER, SLEEVE: SAME AS B883	EA		REF									3-34	6
X2	D									D	B946 SPACER, SLEEVE: SAME AS B883	EA		REF									3-34	6
X2	D									D	B947 SPACER, SLEEVE: 14304; H4601	EA		4									3-34	10
X2	D									D	B948 SPACER, SLEEVE: SAME AS B947	EA		REF									3-34	10
X2	D									D	B949 SPACER, SLEEVE: SAME AS B947	EA		REF									3-34	10
X2	D									D	B950 SPACER, SLEEVE: SAME AS B947	EA		REF									3-34	10

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	D									D	B951 SPACER, SLEEVE: SAME AS B890	EA		1									3-34	8
P	D		5930-910-4134							D	B952 SWITCH, ROTARY: 14304; 162-1103	EA		1							8	15	3-34	1A11S1
X2	D									D	B953 TERMINAL, LUG: SAME AS A581	EA		1									3-34	5
X2	D		5940-660-3759							D	B954 TERMINAL, STUD: SAME AS A430	EA		6									3-33	1A11E18
X2	D		5940-660-3759							D	B955 TERMINAL, STUD: SAME AS A430	EA		REF										1A11E19
X2	D		5940-660-3759							D	B956 TERMINAL, STUD: SAME AS A430	EA		REF										1A11E20
X2	D		5940-660-3759							D	B957 TERMINAL, STUD: SAME AS A430	EA		REF										1A11E21
X2	D		5940-660-3759							D	B958 TERMINAL, STUD: SAME AS A430	EA		REF										1A11E22
X2	D		5940-660-3759							D	B959 TERMINAL, STUD: SAME AS A430	EA		REF										1A11E23
P	D		5961-998-1920							D	B960 TRANSISTOR: SAME AS A441	EA		1									3-33	1A11Q1
P	D		5961-842-6937							D	B961 TRANSISTOR: SAME AS A901	EA		1									3-33	1A11Q2
P	F	S	5820-179-3762							C	B962 OSCILLATOR, RADIO FREQUENCY: 14304; 162-1200	EA		1	2	2	3	2	2	2	46	3	3-36	1A12
P	D		5910-401-6254							D	B963 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		2									3-36	1A12C7
P	D		5910-401-6254							D	B964 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-36	1A12C8
P	D		5910-942-6409							D	B965 CAPACITOR, FIXED, PLASTIC DIELECTRIC: 93790; WMF1D15	EA		3							18	27	3-36	1A12C1
P	D		5910-882-0091							D	B966 CAPACITOR, FIXED, PLASTIC DIELECTRIC: 93790; WMF1S1	EA		1							8	9	3-36	1A12C2
P	D		5910-942-6409							D	B967 CAPACITOR, FIXED, PLASTIC DIELECTRIC: SAME AS B965	EA		REF									3-36	1A12C5
P	D		5910-942-6409							D	B968 CAPACITOR, FIXED, PLASTIC DIELECTRIC: SAME AS B965	EA		REF									3-36	1A12C6
P	D		5950-583-1347							D	B969 COIL, RADIO FREQUENCY: 99800; 1537-28	EA		2							18	18	3-36	1A12L1
P	D		5950-583-1347							D	B970 COIL, RADIO FREQUENCY: SAME AS B969	EA		REF									3-36	1A12L2

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5950-088-1720							D	B971 COIL, RADIO FREQUENCY: SAME AS A366	EA		1									3-36	1A12L3
P	D		5955-910-4125							D	B972 CRYSTAL UNIT, QUARTZ: 14304; Y0600	EA		1							10	4	3-36	1A12Y1
P	D		5955-910-4126							D	B973 CRYSTAL UNIT, QUARTZ: 14304; Y0601	EA		1							10	4	3-36	1A12Y2
P	D		5955-910-4127							D	B974 CRYSTAL UNIT, QUARTZ: 14304; Y0602	EA		1							10	4	3-36	1A12Y3
P	D		5955-910-2867							D	B975 CRYSTAL UNIT, QUARTZ: 14304; Y0603	EA		1							10	4	3-36	1A12Y4
P	D		5955-910-2868							D	B976 CRYSTAL UNIT, QUARTZ: 14304; Y0604	EA		1							10	4	3-36	1A12Y5
P	D		5955-910-2859							D	B977 CRYSTAL UNIT, QUARTZ: 14304; Y0605	EA		1							10	4	3-36	1A12Y6
P	D		5955-911-2498							D	B978 CRYSTAL UNIT, QUARTZ: 14304; Y0606	EA		1							10	4	3-36	1A12Y7
P	D		5955-910-2861							D	B979 CRYSTAL UNIT, QUARTZ: 14304; Y0607	EA		1							10	4	3-36	1A12Y8
P	D		5955-910-2862							D	B980 CRYSTAL UNIT, QUARTZ: 14304; Y0608	EA		1							10	4	3-36	1A12Y9
P	D		5955-910-2802							D	B981 CRYSTAL UNIT, QUARTZ: 14304; Y0609	EA		1							10	4	3-36	1A12Y10
X2	D									D	B982 HOLDER, CRYSTAL UNIT: 14304; 162-1207	EA		1									3-37	9
X2	D									D	B983 PLATE, MOUNTING, SWITCH: 14304; 162-1206	EA		1									3-37	21
X2	D		5305-993-0190							*	B984 SCREW, MACHINE: SAME AS A139	EA		4									3-37	11
X2	D									*	B985 WASHER, FLAT: SAME AS A623	EA		4									3-37	13
X2	D		5310-515-7999							*	B986 WASHER, LOCK: SAME AS A042	EA		4									3-37	12
X2	D									D	B987 PRINTED WIRING BOARD: 14304; 162-1226	EA		1									3-37	7
X2	D		5305-993-0190							*	B988 SCREW, MACHINE: SAME AS A139	EA		1									3-37	1
X2	D		5305-983-6730							*	B989 SCREW, MACHINE: SAME AS B833	EA		3									3-37	1
X2	D									*	B990 WASHER, FLAT: SAME AS A623	EA		3									3-37	4
X2	D		5310-515-7999							*	B991 WASHER, LOCK: SAME AS A042	EA		4									3-37	3
P	D		5905-279-1880							D	B992 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF272J	EA		1							13	14	3-36	1A12R1
P	D		5905-195-6791							D	B993 RESISTOR, FIXED, COMPOSITION: SAME AS B875	EA		1									3-36	1A12P2

(1) SOURCE CD	(1) MAINT. CD	(1) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5905-195-5546							D	B994	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF390J	EA		1							13	14	3-36	1A12R3
P	D		5905-279-3499							D	B995	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF273J	EA		1							8	7	3-36	1A12R4
P	D		5905-279-1876							D	B996	RESISTOR, FIXED, COMPOSITION: SAME AS B874	EA		1									3-36	1A12R5
P	D		5905-195-6453							D	B997	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF562J	EA		1							19	28	3-36	1A12R6
P	D		5905-279-1890							D	B998	RESISTOR, FIXED, COMPOSITION: SAME AS B937	EA		1									3-36	1A12R7
P	D		5905-171-1999							D	B999	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF821J	EA		1							8	7	3-36	1A12R8
P	D		5905-190-8883							D	C001	RESISTOR, FIXED, COMPOSITION: SAME AS B879	EA		1									3-36	1A12R9
X2	D									D	C002	SPACER, SLEEVE: SAME AS B883	EA		3									3-37	6
X2	D									D	C003	SPACER, SLEEVE: SAME AS B883	EA		REF									3-37	6
X2	D									D	C004	SPACER, SLEEVE: SAME AS B883	EA		REF									3-37	6
X2	D									D	C005	SPACER, SLEEVE: SAME AS B886	EA		4									3-37	10
X2	D									D	C006	SPACER, SLEEVE: SAME AS B886	EA		REF									3-37	10
X2	D									D	C007	SPACER, SLEEVE: SAME AS B886	EA		REF									3-37	10
X2	D									D	C008	SPACER, SLEEVE: SAME AS B886	EA		REF									3-37	10
X2	D									D	C009	SPACER, SLEEVE: SAME AS B890	EA		1									3-37	8
P	D		5930-910-4135							D	C010	SWITCH, ROTARY: 14304; 162-1203	EA		1							8	15	3-37	1A12S1
X2	D									D	C011	TERMINAL, LUG: SAME AS A581	EA		1									3-37	5
X2	D		5940-660-3759							D	C012	TERMINAL, STUD: SAME AS A430	EA		6									3-36	1A12E20
X2	D		5940-660-3759							D	C013	TERMINAL, STUD: SAME AS A430	EA		REF									3-36	1A12E31
X2	D		5940-660-3759							D	C014	TERMINAL, STUD: SAME AS A430	EA		REF									3-36	1A12E32

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
X2	D		5940-660-3759							D	C015	TERMINAL, STUD: SAME AS A430	EA		REF									3-36	1A12E33
X2	D		5940-660-3759							D	C016	TERMINAL, STUD: SAME AS A430	EA		REF									3-36	1A12E34
X2	D		5940-660-3759							D	C017	TERMINAL, STUD: SAME AS A430	EA		REF									3-36	1A12E35
P	D		5961-998-1920							D	C018	TRANSISTOR: SAME AS A441	EA		1									3-36	1A12Q1
P	D		5961-842-6937							D	C019	TRANSISTOR: SAME AS A901	EA		1									3-36	1A12Q2
P	F	S	5820-179-3763							C	C020	OSCILLATOR RADIO FREQUENCY: 14304; 162-1300	EA		1	2	2	3	2	2	2	46	3	3-39	1A13
X2	F									*	C021	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1										
X2	F									*	C022	SCREW, MACHINE: SAME AS A622	EA		2										
X2	F									*	C023	SCREW, MACHINE: 14304; H0613	EA		2										
M	D									D	C024	BRACKET, DOUBLE ANGLE: 14304; 162-1306	EA		1									3-40	22
X2	F									*	C025	NUT, ASSEMBLED WASHER: SAME AS A582	EA		2									3-40	21
X2	F									*	C026	SCREW, MACHINE: SAME AS A622	EA		2									3-40	20
P	D		5910-401-6254							D	C027	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		1									3-39	1A13C3
P	D		5910-880-4793							D	C028	CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15F391J500	EA		1							8	6	3-39	1A13C7
P	D		5910-987-3594							D	C029	CAPACITOR, FIXED, PAPER DIELECTRIC: SAME AS B688	EA		2									3-39	1A13C2
P	D		5910-987-3594							D	C030	CAPACITOR, FIXED, PAPER DIELECTRIC: SAME AS B688	EA		REF									3-39	1A13C6
P	D		5910-045-4117							D	C031	CAPACITOR, FIXED, PLASTIC DIELECTRIC: 93790; WMF1P1	EA		1							8	9	3-39	1A13C1
P	D		5910-835-2718							D	C032	CAPACITOR, FIXED, PLASTIC DIELECTRIC: SAME AS A293	EA		1									3-39	1A13C5
P	D		5950-583-1347							D	C033	COIL, RADIO FREQUENCY: SAME AS B969	EA		1									3-39	1A13L1
P	D		5950-088-1720							D	C034	COIL, RADIO FREQUENCY: SAME AS A366	EA		1									3-39	1A13L2

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5950-893-0434							D	C035	COIL, RADIO FREQUENCY: 99800; 1537-76	EA		1							8	6	3-39	1A13L3
X2	D									D	C036	COUPLING HALF, SHAFT: 14304; 162-1307	EA		1									3-40	17
X2	D		5305-272-4123							*	C037	SETSCREW: SAME AS A102	EA		2									3-40	16
P	D		5955-910-2812							D	C038	CRYSTAL UNIT, QUARTZ: 14304; Y0621	EA		1							10	4	3-39	1A13Y1
P	D		5955-910-2804							D	C039	CRYSTAL UNIT, QUARTZ: 14304; Y0622	EA		1							10	4	3-39	1A13Y2
P	D		5955-910-2805							D	C040	CRYSTAL UNIT, QUARTZ: 14304; Y0623	EA		1							10	4	3-39	1A13Y3
P	D		5955-910-2806							D	C041	CRYSTAL UNIT, QUARTZ: 14304; Y0624	EA		1							10	4	3-39	1A13Y4
P	D		5955-910-2807							D	C042	CRYSTAL UNIT, QUARTZ: 14304; Y0625	EA		1							10	4	3-39	1A13Y5
P	D		5955-910-2808							D	C043	CRYSTAL UNIT, QUARTZ: 14304; Y0626	EA		1							10	4	3-39	1A13Y6
P	D		5955-910-2863							D	C044	CRYSTAL UNIT, QUARTZ: 14304; Y0627	EA		1							10	4	3-39	1A13Y7
P	D		5955-910-2809							D	C045	CRYSTAL UNIT, QUARTZ: 14304; Y0628	EA		1							10	4	3-39	1A13Y8
P	D		5955-910-2810							D	C046	CRYSTAL UNIT, QUARTZ: 14304; Y0629	EA		1							10	4	3-39	1A13Y9
P	D		5955-910-2811							D	C047	CRYSTAL UNIT, QUARTZ: 14304; Y0630	EA		1							10	4	3-39	1A13Y10
X2	D									D	C048	HOLDER, CRYSTAL UNIT: 14304; 162-1309	EA		1									3-40	9
X2	D									D	C049	PLATE, MENDING: 14304; 162-1305	EA		1									3-40	14
X2	D		5305-993-0190							*	C050	SCREW, MACHINE: SAME AS A139	EA		2									3-40	12
X2	D		5310-515-7999							*	C051	WASHER, LOCK: SAME AS A042	EA		2									3-40	13
X2	D									D	C052	PRINTED WIRING BOARD: 14304; 162-1326	EA		1									3-40	7
X2	D									*	C053	SCREW, MACHINE: 14304; H0127	EA		2									3-40	1
X2	D		5305-993-0190							*	C054	SCREW, MACHINE: SAME AS A139	EA		1									3-40	5
X2	D		5305-983-6730							*	C055	SCREW, MACHINE: SAME AS B833	EA		1									3-40	4
X2	D									*	C056	WASHER, FLAT: SAME AS A623	EA		4									3-40	3
X2	D		5310-515-7999							*	C057	WASHER, LOCK: SAME AS A042	EA		4									3-40	2

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5905-195-6806							D	C058 RESISTOR, FIXED, COMPOSITION: SAME AS A307	EA		1									3-39	1A13R1
P	D		5905-279-3506							D	C059 RESISTOR, FIXED, COMPOSITION: SAME AS A159	EA		1									3-39	1A13R2
P	D		5905-195-6800							D	C060 RESISTOR, FIXED, COMPOSITION: SAME AS B882	EA		1									3-39	1A13R3
P	D		5905-299-1971							D	C061 RESISTOR, FIXED, COMPOSITION: SAME AS A300	EA		1									3-39	1A13R4
P	D		5905-279-1876							D	C062 RESISTOR, FIXED, COMPOSITION: SAME AS B874	EA		1									3-39	1A13R5
P	D		5905-171-2006							D	C063 RESISTOR, FIXED, COMPOSITION: SAME AS B942	EA		2									3-39	1A13R6
P	D		5905-190-8889							D	C064 RESISTOR, FIXED, COMPOSITION: SAME AS A304	EA		1									3-39	1A13R7
P	D		5905-171-2006							D	C065 RESISTOR, FIXED, COMPOSITION: SAME AS B942	EA		REF									3-39	1A13R8
X2	D									D	C066 SPACER, SLEEVE: SAME AS B883	EA		3									3-40	6
X2	D									D	C067 SPACER, SLEEVE: SAME AS B883	EA		REF									3-40	6
X2	D									D	C068 SPACER, SLEEVE: SAME AS B883	EA		REF									3-40	6
X2	D									D	C069 SPACER, SLEEVE: SAME AS B886	EA		4									3-40	15
X2	D									D	C070 SPACER, SLEEVE: SAME AS B886	EA		REF									3-40	15
X2	D									D	C071 SPACER, SLEEVE: SAME AS B886	EA		REF									3-40	15
X2	D									D	C072 SPACER, SLEEVE: SAME AS B886	EA		REF									3-40	15
X2	D									D	C073 SPACER, SLEEVE: 14304; H4602	EA		2									3-40	23
X2	D									D	C074 SPACER, SLEEVE: SAME AS C073	EA		REF									3-40	23
X2	D									D	C075 SPACER, SLEEVE: SAME AS B890	EA		1									3-40	8
P	D									D	C076 SWITCH, ROTARY: 14304; 162-1308	EA		1							8	15	3-40	1A13S1
X2	D		5940-660-3759							D	C077 TERMINAL, STUD: SAME AS A430	EA		6									3-39	1A13E42

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
X2	D		5940-660-3759							D	C078 TERMINAL, STUD: SAME AS A430	EA		REF									3-39	1A13E43
X2	D		5940-660-3759							D	C079 TERMINAL, STUD: SAME AS A430	EA		REF									3-39	1A13E44
X2	D		5940-660-3759							D	C080 TERMINAL, STUD: SAME AS A430	EA		REF									3-39	1A13E45
X2	D		5940-660-3759							D	C081 TERMINAL, STUD: SAME AS A430	EA		REF									3-39	1A13E46
X2	D		5940-660-3759							D	C082 TERMINAL, STUD: SAME AS A430	EA		REF									3-39	1A13E47
P	D		5961-998-1920							D	C083 TRANSISTOR: SAME AS A441	EA		1									3-39	1A13Q1
P	D		5961-842-6937							D	C084 TRANSISTOR: SAME AS A901	EA		1									3-39	1A13Q2
P	F		5820-135-0379							C	C085A OSCILLATOR, RADIO FREQUENCY: 14304; 591-2060	EA		1	*	*	*	*	*	*	4	4	2-2	1A17
X2	F		5310-969-6959							*	C086 NUT, ASSEMBLED WASHER: SAME AS A029	EA		2										
M	D									C	C087 PANEL, INDICATOR: 14304; 425-0072	EA		1										
M	D									C	C088 PLATE, ELECTRICAL SHIELD: 14304; 162-0087	EA		2										
X2	F		5310-969-6959							*	C089 NUT, ASSEMBLED WASHER: SAME AS A029	EA		1										
X2	F		5310-954-9965							*	C090 NUT, PLAIN, HEXAGON: SAME AS A951	EA		1										
X2	F		5305-984-4983							*	C091 SCREW, MACHINE: SAME AS A053	EA		2										
X2	F		5310-515-7997							*	C092 WASHER, LOCK: SAME AS A054	EA		1										
M	D									C	C093 PLATE, ELECTRICAL SHIELD: SAME AS C088	EA		REF										
X2	F		5310-969-6959							*	C094 NUT, ASSEMBLED WASHER: SAME AS A029	EA		1										
X2	F		5305-984-4983							*	C095 SCREW, MACHINE: SAME AS A053	EA		1										
M	D									C	C096 PLATE, ELECTRICAL SHIELD: 14304; 162-0236	EA		1										
X2	F		5305-889-3116							*	C097 SCREW, MACHINE: SAME AS A041	EA		6										
X2	F		5310-515-7999							*	C098 WASHER, LOCK: SAME AS A042	EA		6										

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
M	D									C	C099 PLATE, ELECTRICAL SHIELD: 14304; 162-0083	EA		1										
X2	F		5305-889-3116							*	C100 SCREW, MACHINE: SAME AS A041	EA		8										
X2	F		5310-515-7999							*	C101 WASHER, LOCK: SAME AS A042	EA		8										
M	D									C	C102 PLATE, ELECTRICAL SHIELD: 14304; 162-0086	EA		1										
X2	F		5305-993-0190							*	C103 SCREW, MACHINE: SAME AS A139	EA		6										
X2	F		5310-515-7999							*	C104 WASHER, LOCK: SAME AS A042	EA		6										
M	D									C	C105 PLATE, MOUNTING, CAPACITOR: 14304; 162-0094	EA		1										
X2	F		5310-969-6959							*	C106 NUT, ASSEMBLED WASHER: SAME AS A029	EA		2										
X2	F									*	C107 NUT, PLAIN, HEXAGON: SAME AS A194	EA		4										
X2	F		5305-993-0190							*	C108 SCREW, MACHINE: SAME AS A139	EA		2										
X2	F		5305-984-4984							*	C109 SCREW, MACHINE: SAME AS A065	EA		2										
X2	F		5310-531-9514							*	C110 WASHER, FLAT: SAME AS A032	EA		2										
X2	F		5310-515-7999							*	C111 WASHER, LOCK: SAME AS A042	EA		4										
X2	F									C	C112 PIN, STRAIGHT, HEADED: 14304; 162-0130	EA		1										
X2	F									C	C113 PIN, STRAIGHT, HEADED: 14304; 162-0131	EA		3										
X2	F									C	C114 PIN, STRAIGHT, HEADED: SAME AS C113	EA		REF										
X2	F									C	C115 PIN, STRAIGHT, HEADED: SAME AS C113	EA		REF										
X2	F									C	C116 PLUNGER, QUICK RELEASE: 14304; 162-0146	EA		3										
X2	F									C	C117 PLUNGER, QUICK RELEASE: SAME AS C116	EA		REF										
X2	F									C	C118 PLUNGER, QUICK RELEASE: SAME AS C116	EA		REF										
P	F		5950-498-3507							C	C119 REACTOR: 83325; P5803	EA		1	*	*	*	*	*	*	5	3	2-2	1L4

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
X2	F		5310-655-6534							*	C120	NUT, ASSEMBLED WASHER: SAME AS A021	EA		4										
P	F		5945-910-2846							C	C121	RELAY, ARMATURE: 77342; KHS17A11-120V	EA		1	*	*	2	*	*	2	8	9	2-3	1K1
P	F									C	C122	RELAY, ARMATURE: SAME AS A744	EA		3									2-3	1K2
P	F									C	C123	RELAY, ARMATURE: SAME AS A744	EA		REF									2-3	1K3
P	F									C	C124	RELAY, ARMATURE: SAME AS A744	EA		REF									2-3	1K4
A	F	S								C	C125	RELAY, BRACKET ASSEMBLY: 14304; 162-0188	EA		1									2-3	1A20
X2	F		5305-889-3116							*	C126	SCREW, MACHINE: SAME AS A041	EA		4										
X2	F		5310-515-7999							*	C127	WASHER, LOCK: SAME AS A042	EA		4										
X2	F									D	C128	BRACKET, ANGLE: 14304; 162-0376	EA		1										
P	F									D	C129	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS B026	EA		2										1A2C9
P	F									D	C130	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS B026	EA		REF										1A20C10
P	F		5920-050-4953							D	C131	FUSE, CARTRIDGE: 75915; 31201-5	EA		1	2	3	6	3	2	2	71	75		1A20F3
X2	F		5920-142-7439							D	C132	FUSEHOLDER: 71400; 4405	EA		1										1A20XF3
X2	F		5305-984-4988							*	C133	SCREW, MACHINE: SAME AS A091	EA		1										
X2	F									*	C134	NUT, ASSEMBLED WASHER: SAME AS A582	EA		1										
P	F		5961-904-3486							D	C135	RETAINER, TRANSISTOR: 98978; TXB2P032-037	EA		1	*	*	*	*	*	*	4	7		
P	F		5905-254-7096							D	C136	RESISTOR, FIXED, COMPOSITION: 81349; RC42GF823J	EA		1	*	*	2	*	*	2	8	7		1A20R5
P	F		5905-279-3505							D	C137	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF392J	EA		1	*	*	2	*	*	2	8	7		1A20R6
P	F		5905-190-8889							D	C138	RESISTOR, FIXED, COMPOSITION: SAME AS A304	EA		2										1A20R7
P	F		5905-190-8889							D	C139	RESISTOR, FIXED, COMPOSITION: SAME AS A304	EA		REF										1A20R8

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	F		5905-279-2616							D	C140 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF153J	EA		1	*	*	1	*	*	1	5	2		1A20R56
P	F		5905-539-2479							D	C141 RESISTOR, VARIABLE: 44655; CLU5021	EA		1	*	*	2	*	*	2	8	8		1A20R4
P	F		5961-944-8714							D	C142 SEMICONDUCTOR DEVICE, DIODE: 12969; UZ736	EA		1	*	*	2	*	*	2	8	15		1A20CR12
P	F		5961-921-3781							D	C143 SEMICONDUCTOR DEVICE, DIODE: 80131; 1N4001	EA		2	1	2	3	1	1	1	59	40		1A20CR17
P	F		5961-921-3781							D	C144 SEMICONDUCTOR DEVICE, DIODE: SAME AS C143	EA		REF										1A20CR18
P	F		5961-836-6667							D	C145 SEMICONDUCTOR DEVICE, DIODE: 80131; 1N816	EA		1	2	2	3	2	2	2	33	90		1A20CR23
X2	F		5935-022-9148							D	C146 SOCKET, RELAY: 77342; 27E006	EA		3										1A20J37
X2	F		5935-022-9148							D	C147 SOCKET, RELAY: SAME AS C146	EA		REF										1A20J39
X2	F		5935-022-9148							D	C148 SOCKET, RELAY: SAME AS C146	EA		REF										1A20J41
X2	F									D	C149 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		8										
X2	F		5305-889-3116							*	C150 SCREW, MACHINE: SAME AS A041	EA		1										
X2	F		5310-515-7999							*	C151 WASHER, LOCK: SAME AS A042	EA		1										
X2	F									D	C152 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F		5305-889-3116							*	C153 SCREW, MACHINE: SAME AS A041	EA		1										
X2	F		5310-515-7999							*	C154 WASHER, LOCK: SAME AS A042	EA		1										
X2	F									D	C155 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F		5305-889-3116							*	C156 SCREW, MACHINE: SAME AS A041	EA		1										
X2	F		5310-515-7999							*	C157 WASHER, LOCK: SAME AS A042	EA		1										
X2	F									D	C158 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F		5305-889-3116							*	C159 SCREW, MACHINE: SAME AS A041	EA		1										

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
X2	F		5310-515-7999							*	C160 WASHER, LOCK: SAME AS A042	EA		1										
X2	F									D	C161 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F		5305-889-3116							*	C162 SCREW, MACHINE: SAME AS A041	EA		1										
X2	F		5310-515-7999							*	C163 WASHER, LOCK: SAME AS A042	EA		1										
X2	F									D	C164 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F		5305-889-3116							*	C165 SCREW, MACHINE: SAME AS A041	EA		1										
X2	F		5310-515-7999							*	C166 WASHER, LOCK: SAME AS A042	EA		1										
X2	F									D	C167 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F		5305-889-3116							*	C168 SCREW, MACHINE: SAME AS A041	EA		1										
X2	F		5310-515-7999							*	C169 WASHER, LOCK: SAME AS A042	EA		1										
X2	F									D	C170 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F		5305-889-3116							*	C171 SCREW, MACHINE: SAME AS A041	EA		1										
X2	F		5310-515-7999							*	C172 WASHER, LOCK: SAME AS A042	EA		1										
X2	F									D	C173 TERMINAL, LUG: SAME AS A581	EA		5										
X2	F									D	C174 TERMINAL, LUG: SAME AS A581	EA		REF										
X2	F									D	C175 TERMINAL, LUG: SAME AS A581	EA		REF										
X2	F									D	C176 TERMINAL, LUG: SAME AS A581	EA		REF										
X2	F									D	C177 TERMINAL, LUG: SAME AS A581	EA		REF										
P	F		5961-877-6704							D	C178 TRANSISTOR: 16736; 2N1479	EA		2	*	*	1	*	*	1	13	6		1A20Q1
P	F		5961-877-6704							D	C179 TRANSISTOR: SAME AS C178	EA		REF										1A20Q2
P	F		5905-279-1903							C	C180 RESISTOR, FIXED, COMPOSITION: 81349; RC42GF474J	EA		1	*	*	2	*	*	2	8	7		1R1

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	F		5905-257-0937							C	C181 RESISTOR, FIXED, COMPOSITION: 81349; RC42GF472J	EA		1	*	*	2	*	*	2	8	7		1R2
P	F		5905-195-6791							C	C182 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF681J	EA		1	*	*	*	*	*	*	5	2		1R3
P	F		5905-279-2628							C	C183 RESISTOR, FIXED, COMPOSITION: 81349; RC32GF271J	EA		1	*	*	2	*	*	2	8	7		1R9
P	F		5905-185-8510							C	C184 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF103J	EA		1	*	*	*	*	*	*	5	2		1R11
P	F		5905-190-8889							C	C185 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF101J	EA		3	*	1	1	*	1	1	19	8		1R12
P	F		5905-190-8889							C	C186 RESISTOR, FIXED, COMPOSITION: SAME AS C185	EA		REF										1R13
P	F		5905-190-8889							C	C187 RESISTOR, FIXED, COMPOSITION: SAME AS C185	EA		REF										1R14
P	F									C	C187A RESISTOR, FIXED, FILM: 16299; LP17-500	EA		1	*	*	2	*	*	2	8	7		1R16
P	F		5905-254-7101							C	C188 RESISTOR, FIXED, COMPOSITION: 81349; RC42GF104J	EA		1	*	*	2	*	*	2	8	7		1R25
P	F		5905-192-3973							C	C189 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF471J	EA		1	*	*	1	*	*	1	13	6		1R27
P	F		5905-299-2028							C	C190 RESISTOR, FIXED, COMPOSITION: 81349; RC32GF153J	EA		1	*	*	2	*	*	2	8	7		1R28
P	F		5905-195-9481							C	C191 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF751J	EA		1	*	*	2	*	*	2	8	7		1R29
P	F		5905-299-1971							C	C192 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF822J	EA		1	*	*	*	*	*	*	5	2		1R30
P	F		5905-171-1998							C	C193 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF333J	EA		1	*	*	2	*	*	2	8	7		
P	F		5905-279-1877							C	C194 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF242J	EA		1	*	*	*	*	*	*	5	2		1R31
P	F		5905-279-3507							C	C195 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF162J	EA		1	*	*	2	*	*	2	8	7		1R32

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	F		5905-279-3418							C	C196 RESISTOR, FIXED, COMPOSITION: 81349; RC42GF390J	EA		3	*	2	2	*	2	2	18	21		1R40
P	F		5905-279-3418							C	C197 RESISTOR, FIXED, COMPOSITION: SAME AS C196	EA		REF										1R41
P	F		5905-279-3418							C	C198 RESISTOR, FIXED, COMPOSITION: SAME AS C196	EA		REF										1R42
P	F		5905-254-9201							C	C199 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF473J	EA		1	*	*	2	*	*	2	8	7		1R50
P	F		5905-279-1738							C	C200 RESISTOR, FIXED, COMPOSITION: 81349; RC32GF220J	EA		1	*	*	2	*	*	2	8	7		1R55
P	F		5905-279-1876							C	C201 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF222J	EA		1	*	*	*	*	*	*	5	2		1R57
P	F		5905-903-0775							C	C202 RESISTOR, VARIABLE: 01121; JA1P042F501UA	EA		1	*	*	2	*	*	2	8	8	2-2	1R10
P	F									C	C203 RESISTOR, VARIABLE: 14304; R3174	EA		1	*	*	2	*	*	2	8	8	2-2	1R19
P	F									C	C204 RESISTOR, VARIABLE: 01121; JA1P042F102AA	EA		1	*	*	2	*	*	2	8	8	2-2	1R20
X2	F		5910-913-7436							C	C205 RETAINER, CAPACITOR: 81349; CP072SA5	EA		4										
X2	F		5310-655-6534							*	C205A NUT, ASSEMBLED WASHER: SAME AS A021	EA		1										
X2	F		5910-913-7436							C	C205B RETAINER, CAPACITOR: SAME AS C205	EA		REF										
X2	F		5310-655-6534							*	C205C NUT, ASSEMBLED WASHER: SAME AS A021	EA		1										
X2	F		5910-913-7436							C	C205E RETAINER, CAPACITOR: SAME AS C205	EA		REF										
X2	F		5310-655-6534							*	C205F NUT, ASSEMBLED WASHER: SAME AS A021	EA		1										
X2	F		5910-913-7436							C	C205G RETAINER, CAPACITOR: SAME AS C205	EA		REF										
X2	F		5310-655-6534							*	C205H NUT, ASSEMBLED WASHER: SAME AS A021	EA		1										
X2	F									C	C206 SCREW, SHOULDER: 73734; 1610	EA		4									2-3	1MP115
X2	F									C	C206A SCREW, SHOULDER: SAME AS C206	EA		REF									2-3	1MP115A
X2	F									C	C206B SCREW, SHOULDER: SAME AS C206	EA		REF									2-3	1MP115B

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									C	C206C SCREW, SHOULDER: SAME AS C206	EA		REF									2-3	1MP115C
X2	F		5330-574-6704							C	C207 PACKING WITH RETAINER SAME AS A038	EA		3										
X2	F		5330-574-6704							C	C207A PACKING WITH RETAINER: SAME AS A038	EA		REF										
X2	F		5330-574-6704							C	C207B PACKING WITH RETAINER: SAME AS A038	EA		REF										
P	F		5961-972-9395							C	C208 SEMICONDUCTOR DEVICE, DIODE: 95303; 1N3256	EA		11	2	3	5	2	2	2	53	165		1CR1
P	F		5961-972-9395							C	C209 SEMICONDUCTOR DEVICE, DIODE: SAME AS C208	EA		REF										1CR2
P	F		5961-972-9395							C	C210 SEMICONDUCTOR DEVICE, DIODE: SAME AS C208	EA		REF										1CR3
P	F		5961-972-9395							C	C211 SEMICONDUCTOR DEVICE, DIODE: SAME AS C208	EA		REF										1CR4
P	F		5961-972-9395							C	C212 SEMICONDUCTOR DEVICE, DIODE: SAME AS C208	EA		REF										1CR5
P	F		5961-972-9395							C	C213 SEMICONDUCTOR DEVICE, DIODE: SAME AS C208	EA		REF										1CR6
P	F		5961-972-9395							C	C214 SEMICONDUCTOR DEVICE, DIODE: SAME AS C208	EA		REF										1CR7
P	F		5961-972-9395							C	C215 SEMICONDUCTOR DEVICE, DIODE: SAME AS C208	EA		REF										1CR8
P	F		5961-972-9395							C	C216 SEMICONDUCTOR DEVICE, DIODE: SAME AS C208	EA		REF										1CR9
P	F		5961-972-9395							C	C217 SEMICONDUCTOR DEVICE, DIODE: SAME AS C208	EA		REF										1CR10
P	F		5961-972-9395							C	C218 SEMICONDUCTOR DEVICE, DIODE: SAME AS C208	EA		REF										1CR11
P	F		5961-921-3781							C	C219 SEMICONDUCTOR DEVICE, DIODE: SAME AS C143	EA		5										1CR13
P	F		5961-921-3781							C	C220 SEMICONDUCTOR DEVICE, DIODE: SAME AS C143	EA		REF										1CR14

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	F		5961-921-3781							C	C221	SEMICONDUCTOR DEVICE, DIODE: SAME AS C143	EA		REF										1CR15
P	F		5961-921-3781							C	C222	SEMICONDUCTOR DEVICE, DIODE: SAME AS C143	EA		REF										1CR16
P	F		5961-921-3781							C	C223	SEMICONDUCTOR DEVICE, DIODE: SAME AS C143	EA		REF										1CR19
P	F		5961-814-0768							C	C224	SEMICONDUCTOR DEVICE, DIODE: 81349; RC20GF183J	EA		1	*	*	*	*	*	*	8	6		1CR22
X2	F									C	C225	SHAFT ASSEMBLY: 14304; 162-0132	EA		1										
X2	F									*	C226	NUT, ASSEMBLED WASHER: SAME AS A582	EA		2										
X2	F		5305-800-7261							*	C227	SETSCREW: SAME AS B176	EA		2										
X2	F		5310-782-1349							*	C228	WASHER, FLAT: SAME AS A111	EA		2										
X2	F									C	C229	SHAFT ASSEMBLY: 14304; 162-0100	EA		1										
X2	F									D	C230	COUPLING HALF, SHAFT: 14304; 162-0119	EA		1										
X2	F									*	C231	SCREW, MACHINE: 88044; AN507CR440-2	EA		2										
X2	F		5305-543-5832							*	C232	SETSCREW: SAME AS A106	EA		1										
X2	F									D	C233	PLATE, ELECTRICAL SHIELD: 14304; 162-0076	EA		1										
X2	F									D	C234	SHAFT, SHOULDERED: 14304; 162-0074	EA		1										
X2	F									D	C235	SPROCKET, WHEEL: 14304; 162-0142	EA		1										
X2	F		5315-039-5563							*	C236	PIN, SPRING: 72962; 79-022-094-0375	EA		1										
X2	F									C	C237	SHAFT, STRAIGHT: 14304; H0094	EA		1										
X2	F									C	C238	SHAFT, STRAIGHT: 14304; H0195	EA		1										
X2	F									C	C239	SHAFT LOCK, ELECTRICAL COMPONENT: 14304; 162-0117	EA		1										
X2	F									C	C240	SHIELD, AMPLIFIER-LIMITER: 14304; 162-0080	EA		1										
X2	F									*	C241	NUT, ASSEMBLED WASHER: SAME AS A582	EA		2										

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7)						(8)	(9)	(10)	
(A)	(B)	(C)	(2)	MODEL						IND CD	(3)	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	30 DAY MAINT. ALW.						1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	ILLUSTRATIONS	
															DS			GS						
SOURCE CD	MAINT. CD	REC. CODE	FEDERAL STOCK NUMBER	1	2	3	4	5	6		DESCRIPTION				(A) 1-20	(B) 21-50	(C) 51-100	(A) 1-20	(B) 21-50	(C) 51-100			(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									*	C242 SCREW, MACHINE: SAME AS C231	EA		2										
X2	F		5305-993-0190							*	C243 SCREW, MACHINE: SAME AS A139	EA		4										
X2	F		5310-782-1349							*	C244 WASHER, FLAT: SAME AS A111	EA		4										
X2	F		5310-515-7999							*	C245 WASHER, LOCK: SAME AS A042	EA		4										
X2	F									C	C246 SHIELD, AMPLIFIER-LIMITER: 14304; 162-0082	EA		1										
X2	F									*	C247 SCREW, MACHINE: SAME AS A622	EA		2										
X2	F		5305-993-0190							*	C248 SCREW, MACHINE: SAME AS A139	EA		5										
X2	F		5310-515-7999							*	C249 WASHER, LOCK: SAME AS A042	EA		5										
X2	F									C	C250 SHIELD, CAPACITOR: 14304; 162-0380	EA		1										
X2	F		5305-889-3116							*	C251 SCREW, MACHINE: SAME AS A041	EA		2										
X2	F		5310-515-7999							*	C252 WASHER, LOCK: SAME AS A042	EA		2										
X2	F		5935-129-9358							C	C252A SOCKET, ELECTRON TUBE: 81349; TS101P02	EA		3										1XV1
X2	F		5935-129-9358							C	C252B SOCKET, ELECTRON TUBE: SAME AS C252A	EA		REF										1XV2
X2	F		5935-129-9358							C	C252C SOCKET, ELECTRON TUBE: SAME AS C252A	EA		REF										1XV3
X2	F		5310-954-0981							C	C253 SPACER, SLEEVE: 06540; 4197	EA		4										
X2	F		5305-984-4983							*	C254 SCREW, MACHINE: SAME AS A053	EA		1										
X2	F		5310-515-7997							*	C255 WASHER, LOCK: SAME AS A054	EA		1										
X2	F		5310-954-0981							C	C256 SPACER, SLEEVE: SAME AS C253	EA		REF										
X2	F		5905-984-4983							*	C257 SCREW, MACHINE: SAME AS A053	EA		1										
X2	F		5310-515-7997							*	C258 WASHER, LOCK: SAME AS A054	EA		1										
X2	F		5310-954-0981							C	C259 SPACER, SLEEVE: SAME AS C253	EA		REF										
X2	F		5305-984-4983							*	C260 SCREW, MACHINE: SAME AS A053	EA		1										
X2	F		5310-515-7997							*	C261 WASHER, LOCK: SAME AS A054	EA		1										

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F		5310-954-0981							C	C262 SPACER, SLEEVE: SAME AS C253	EA		REF										
X2	F		5305-984-4983							*	C263 SCREW, MACHINE: SAME AS A053	EA		1										
X2	F		5310-515-7997							*	C264 WASHER, LOCK: SAME AS A054	EA		1										
X2	F									C	C265 SPACER, SLEEVE: SAME AS C073	EA		1										
X2	F									C	C266 SPACER, SLEEVE: 14304; H4603	EA		4										
X2	F									C	C267 SPACER, SLEEVE: SAME AS C266	EA		REF										
X2	F									C	C268 SPACER, SLEEVE: SAME AS C266	EA		REF										
X2	F									C	C269 SPACER, SLEEVE: SAME AS C266	EA		REF										
X2	F									C	C269A SPACER, SLEEVE: 14304; H0110	EA		4										
X2	F									C	C269B SPACER, SLEEVE: SAME AS C269A	EA		REF										
X2	F									C	C269C SPACER, SLEEVE: SAME AS C269A	EA		REF										
X2	F									C	C269E SPACER, SLEEVE: SAME AS C269A	EA		REF										
X2	F									C	C270 SPACER, STEPPED: SAME AS A791	EA		4										
X2	F									C	C271 SPACER, STEPPED: SAME AS A791	EA		REF										
X2	F									C	C272 SPACER , STEPPED: SAME AS A791	EA		REF										
X2	F									C	C273 SPACER, STEPPED: SAME AS A791	EA		REF										
X2	F									C	C274 SPACER, STEPPED: 14304; H4702	EA		2										
X2	F									C	C275 SPACER, STEPPED: SAME AS C274	EA		REF										
X2	F									C	C276 SPACER, STEPPED: 14304; 162-0105	EA		2										
X2	F									*	C277 NUT, ASSEMBLED WASHER: 73734; 9228	EA		1										
X2	F									C	C278 SPACER, STEPPED: SAME AS C276	EA		REF										
X2	F									*	C279 NUT, ASSEMBLED WASHER: SAME AS C277	EA		1										
X2	F									C	C280 SPACER, STEPPED: 14304; 162-0106	EA		2										
X2	F									*	C281 NUT, ASSEMBLED WASHER: SAME AS C277	EA		1										

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1 - 20	DS (B) 21-50	DS (C) 51-100	GS (A) 1 - 20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
X2	F									C	C282	SPACER, STEPPED: SAME AS C280	EA		REF										
X2	F									*	C283	NUT, ASSEMBLED WASHER: SAME AS C277	EA		1										
P	F		5915-463-4737							C	C284	SUPPRESSOR, PARASETIC: 14304; 162-0187	EA		3	*	2	2	*	2	2	18	24	2-6	1FL1
P	F		5915-463-4737							C	C285	SUPPRESSOR, PARASETIC: SAME AS C284	EA		REF									2-6	1FL2
P	F		5915-463-4737							C	C286	SUPPRESSOR, PARASETIC: SAME AS C284	EA		REF									2-6	1FL3
P	F		5915-191-9360							C	C287	SUPPRESSOR, PARASETIC: 14304; 162-0384	EA		1	*	*	2	*	*	2	8	8		1FL4
P	F		5930-543-1237							C	C289	SWITCH, PUSH: 81073; 23-1	EA		1	*	*	2	*	*	2	8	15	2-3	1S7
P	F		5930-518-4531							C	C290	SWITCH, ROTARY: 14304; 162-0152	EA		1	*	*	2	*	*	2	8	15	2-3	1S1
P	F		5930-309-9271							C	C291	SWITCH SECTION, ROTARY: 14304; 162-0151	EA		2	*	2	2	*	*	2	13	30	2-3	1S6A
P	F		5930-309-9271							C	C292	SWITCH SECTION, ROTARY: SAME AS C291	EA		REF									2-3	1S6B
P	F		5930-583-6582							C	C293	SWITCH, SENSITIVE: 91929; 11SM1	EA		1	*	*	2	*	*	2	5	15	2-3	1S5
P	F		5820-135-0378							C	C294	SWITCH, SUBASSEMBLY: 14304; 162-0191	EA		1	*	2	2	*	2	2	27	15	2-3	1S2
P	D		5995-136-2332							D	C295	CABLE ASSEMBLY, RADIO FREQUENCY: 14304; 162-0316	EA		1	*	*	2	*	*	2	8	13		1W1
X1										E	C296	CONNECTOR, PLUG, ELECTRICAL: SAME AS A631	EA		1										1P10
P	D		5910-401-6254							D	C297	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		2										1C51
P	D		5910-401-6254							D	C298	CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF										1C57
P	D		5950-814-1608							D	C299	COIL, RADIO FREQUENCY: SAME AS A191	EA		1										1L8
P	D		5905-723-5251							D	C300	RESISTOR, FIXED, COMPOSITION: SAME AS B479	EA		2										1R18
P	D		5905-687-0000							D	C301	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF183J	EA		1	*	*	2	*	*	2	8	7		1R22
P	D		5905-723-5251							D	C302	RESISTOR, FIXED, COMPOSITION: SAME AS A897	EA		REF										1R23

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5905-683-7723							D	C303 RESISTOR, FIXED, COMPOSITION: SAME AS A394	EA		1										1R24
P	D		5905-686-3798							D	C304 RESISTOR, FIXED, COMPOSITION: SAME AS A389	EA		1										1R26
P	D		5905-687-0002							D	C305 RESISTOR, FIXED, COMPOSITION: SAME AS B498	EA		1										1R33
P	D		5961-556-2091							D	C306 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		3										1CR20
P	D		5961-556-2091							D	C307 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF										1CR21
P	D		5961-556-2091							D	C308 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF										1CR24
P	D									D	C309 SWITCH, ROTARY: 14304; 162-0150	EA		1	*	*	2	*	*	2	8	15	2-3	1S2
P	F		5930-655-1582							C	C310 SWITCH, TOGGLE: SAME AS A231	EA		3									2-2	1S3
P	F		5930-655-1582							C	C311 SWITCH, TOGGLE: SAME AS A231	EA		REF									2-2	1S4
P	F		5930-655-1582							C	C312 SWITCH, TOGGLE: SAME AS A231	EA		REF									2-2	1S1
P	F	S	5820-135-0377							C	C313 SYNTHESIZER, ELECTRICAL FREQUENCY: 14304; 162-0300	EA		1	3	9	16	5	3	4	198	3	3-10	1A2
X2	F		5305-889-3116							*	C314 SCREW, MACHINE: SAME AS A041	EA		4										
X2	F		5310-782-1349							*	C315 WASHER, FLAT: SAME AS A111	EA		4										
X2	F		5310-515-7999							*	C316 WASHER, LOCK: SAME AS A042	EA		4										
P	D		5910-401-6254							D	C317 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		7									3-10	1A2C3
P	D		5910-401-6254							D	C318 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-10	1A2C11
P	D		5910-401-6254							D	C319 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-10	1A2C19
P	D		5910-825-0403							D	C320 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A997	EA		4									3-10	1A2C27

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5910-825-0403							D	C321 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A997	EA		REF									3-10	1A2C28
P	D		5910-825-0403							D	C322 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A997	EA		REF									3-10	1A2C32
P	D		5910-910-4177							D	C323 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 90634; CK06R680G	EA		1	*	*	2	*	*	2	8	6	3-10	1A2C34
P	D		5910-825-0403							D	C324 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A997	EA		REF									3-10	1A2C35
P	D									D	C325 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 90634; CK08L331G	EA		1	*	*	2	*	*	2	8	6	3-10	1A2C36
P	D		5910-910-4178							D	C326 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 90634; CK57L121G	EA		1	*	*	2	*	*	2	8	6	3-10	1A2C38
P	D		5910-401-6254							D	C327 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-10	1A2C39
P	D		5910-401-6254							D	C328 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-10	1A2C42
P	D		5910-401-6254							D	C329 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-10	1A2C45
P	D		5910-401-6254							D	C330 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-10	1A2C46
P	D		5910-934-2865							D	C331 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		3									3-10	1A2C6
P	D		5910-934-2865							D	C332 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-10	1A2C14
P	D		5910-934-2865							D	C333 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-10	1A2C22
P	D		5910-992-5020							D	C334 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A720	EA		9									3-10	1A2C2
P	D		5910-992-5020							D	C335 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A720	EA		REF									3-10	1A2C4
P	D		5910-992-5020							D	C336 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A720	EA		REF									3-10	1A2C5

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D									D	C337 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; 15C050J500	EA		2						2	13	12	3-10	1A2C7
P	D		5910-782-1219							D	C338 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B424	EA		3									3-10	1A2C8
P	D		5910-992-5020							D	C339 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A720	EA		REF									3-10	1A2C10
P	D		5910-992-5020							D	C340 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A720	EA		REF									3-10	1A2C12
P	D		5910-992-5020							D	C341 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A720	EA		REF									3-10	1A2C13
P	D									D	C342 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS C337	EA		REF									3-10	1A2C15
P	D		5910-782-1219							D	C343 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B424	EA		REF									3-10	1A2C16
P	D		5910-992-5020							D	C344 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A720	EA		REF									3-10	1A2C18
P	D		5910-992-5020							D	C345 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A720	EA		REF									3-10	1A2C20
P	D		5910-992-5020							D	C346 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A720	EA		REF									3-10	1A2C21
P	D									D	C347 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15C100J500	EA		1							8	6	3-10	1A2C23
P	D		5910-782-1219							D	C348 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B424	EA		REF									3-10	1A2C24
P	D		5910-984-2174							D	C349 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B840	EA		1									3-10	1A2C26
P	D		5910-088-1246							D	C350 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15E560J500	EA		1							8	6	3-10	1A2C29
P	D		5910-486-68[illegible]							D	C351 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15F331J500	EA		1							8	6	3-10	1A2C30
P	D		5910-891-[illegible]							D	C352 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		3									3-10	1A2C33

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	D		5910-088-1629							D	C353 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B560	EA		1									3-10	1A2C37
P	D		5910-851-3328							D	C354 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		REF									3-10	1A2C41
P	D		5910-088-1624							D	C355 CAPACITOR, FIXED, MICA DIELECTRIC: 93790; CD15F221J500	EA		1							8	6	3-10	1A2C43
P	D									D	C356 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS B905	EA		1									3-10	1A2C44
P	D		5910-851-3328							D	C357 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		REF									3-10	1A2C47
P	D		5910-910-4174							D	C358 CAPACITOR, FIXED, PLASTIC DIELECTRIC: 12673; 32P222J100	EA		1							8	9	3-10	1A2C9
P	D		5910-910-4175							D	C359 CAPACITOR, FIXED, PLASTIC DIELECTRIC: 12673; 32P223J100	EA		1							8	9	3-10	1A2C17
P	D		5910-910-4176							D	C360 CAPACITOR, FIXED, PLASTIC DIELECTRIC: 12673; 32P334J100	EA		1							8	9	3-10	1A2C25
P	D									D	C361 CAPACITOR, FIXED, PLASTIC DIELECTRIC: 93790; DMF1P22	EA		1							8	9	3-10	1A2C31
P	D		5950-060-9188							D	C362 COIL, RADIO FREQUENCY: SAME AS A363	EA		4									3-10	1A2L1
P	D		5950-060-9188							D	C363 COIL, RADIO FREQUENCY: SAME AS A363	EA		REF									3-10	1A2L2
P	D		5950-060-9188							D	C364 COIL, RADIO FREQUENCY: SAME AS A363	EA		REF									3-10	1A2L3
P	D		5950-060-9188							D	C365 COIL, RADIO FREQUENCY: SAME AS A363	EA		REF									3-10	1A2L4
P	D		5950-815-7306							D	C366 COIL, RADIO FREQUENCY: 99800; 1537-06	EA		1							8	6	3-10	1A2L5
P	D		5950-581-8934							D	C367 COIL, RADIO FREQUENCY: 99800; 1537-02	EA		1							8	6	3-10	1A2L6
P	D		5950-769-4326							D	C368 COIL, RADIO FREQUENCY: SAME AS B442	EA		1									3-10	1A2L7
P	D		5935-704-3506							D	C369 CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		1									3-10	1A2J43
X2	D									D	C370 PRINTED WIRING BOARD: 14304; 162-0306	EA		1									3-10	1A2MP1
P	D		5905-279-1734							D	C371 RESISTOR, FIXED, COMPOSITION: SAME AS B731	EA		1									3-10	1A2R1

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	D		5905-279-3504							D	C372 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF472J	EA		2							13	14	3-10	1A2R2
P	D		5905-185-8510							D	C373 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		16									3-10	1A2R3
P	D		5905-279-3503							D	C374 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF682J	EA		6							33	42	3-10	1A2R4
P	D		5905-190-8881							D	C375 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF182J	EA		8							40	56	3-10	1A2R5
P	D		5905-185-8510							D	C376 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R6
P	D		5905-185-8510							D	C377 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R7
P	D		5905-192-3971							D	C378 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF331J	EA		1							8	7	3-10	1A2R8
P	D		5905-279-3503							D	C379 RESISTOR, FIXED, COMPOSITION: SAME AS C374	EA		REF									3-10	1A2R9
P	D		5905-190-8881							D	C380 RESISTOR, FIXED, COMPOSITION: SAME AS C375	EA		REF									3-10	1A2R10
P	D		5905-185-8510							D	C381 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R12
P	D		5905-279-3514							D	C382 RESISTOR, FIXED, COMPOSITION: 81349; RG20GF181J	EA		1							8	7	3-10	1A2R13
P	D		5905-279-3513							D	C383 RESISTOR, FIXED, COMPOSITION: SAME AS B943	EA		3									3-10	1A2R14
P	D		5905-185-8510							D	C384 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R15
P	D		5905-190-8880							D	C385 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF122J	EA		2							13	14	3-10	1A2R16
P	D		5905-185-8510							D	C386 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R17
P	D		5905-279-3503							D	C387 RESISTOR, FIXED, COMPOSITION: SAME AS C374	EA		REF									3-10	1A2R18

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5905-190-8881							D	C388 RESISTOR, FIXED, COMPOSITION: SAME AS C375	EA		REF									3-10	1A2R19
P	D		5905-185-8510							D	C389 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R20
P	D		5905-185-8510							D	C390 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R21
P	D		5905-279-3503							D	C391 RESISTOR, FIXED, COMPOSITION: SAME AS C374	EA		REF									3-10	1A2R22
P	D		5905-190-8881							D	C392 RESISTOR, FIXED, COMPOSITION: SAME AS C375	EA		REF									3-10	1A2R23
P	D		5905-185-8510							D	C393 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R25
P	D		5905-195-6800							D	C394 RESISTOR, FIXED, COMPOSITION: SAME AS B882	EA		2									3-10	1A2R26
P	D		5905-279-3513							D	C395 RESISTOR, FIXED, COMPOSITION: SAME AS B943	EA		REF									3-10	1A2R27
P	D		5905-185-8510							D	C396 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R28
P	D		5905-190-8881							D	C397 RESISTOR, FIXED, COMPOSITION: SAME AS C375	EA		REF									3-10	1A2R29
P	D		5905-185-8510							D	C398 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R30
P	D		5905-279-3503							D	C399 RESISTOR, FIXED, COMPOSITION: SAME AS C374	EA		REF									3-10	1A2R31
P	D		5905-185-8510							D	C400 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R32
P	D		5905-190-8881							D	C401 RESISTOR, FIXED, COMPOSITION: SAME AS C375	EA		REF									3-10	1A2R33
P	D		5905-185-8510							D	C402 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R34
P	D		5905-190-8881							D	C403 RESISTOR, FIXED, COMPOSITION: SAME AS C375	EA		REF									3-10	1A2R35

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
															DS			GS						
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1 - 20	(B) 21-50	(C) 51-100	(A) 1 - 20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5905-279-3513							D	C404 RESISTOR, FIXED, COMPOSITION: SAME AS B943	EA		REF									3-10	1A2R36
P	D		5905-279-3503							D	C405 RESISTOR, FIXED, COMPOSITION: SAME AS C374	EA		REF									3-10	1A2R37
P	D		5905-279-1880							D	C406 RESISTOR, FIXED, COMPOSITION: SAME AS B992	EA		1									3-10	1A2R39
P	D		5905-185-8510							D	C407 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R40
P	D		5905-195-6806							D	C408 RESISTOR, FIXED, COMPOSITION: SAME AS A307	EA		2									3-10	1A2R41
P	D		5905-195-6800							D	C409 RESISTOR, FIXED, COMPOSITION: SAME AS B882	EA		REF									3-10	1A2R42
P	D		5905-185-8510							D	C410 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R43
P	D		5905-279-1897							D	C411 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF560J	EA		1							8	7	3-10	1A2R44
P	D		5905-279-1894							D	C412 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF820J	EA		1							8	7	3-10	1A2R45
P	D		5905-279-3504							D	C413 RESISTOR, FIXED, COMPOSITION: SAME AS C372	EA		REF									3-10	1A2R46
P	D		5905-195-6453							D	C414 RESISTOR, FIXED, COMPOSITION: SAME AS B997	EA		3									3-10	1A2R47
P	D		5905-279-3506							D	C415 RESISTOR, FIXED, COMPOSITION: SAME AS A159	EA		3									3-10	1A2R48
P	D		5905-299-1971							D	C416 RESISTOR, FIXED, COMPOSITION: SAME AS A300	EA		1									3-10	1A2R49
P	D		5905-190-8881							D	C417 RESISTOR, FIXED, COMPOSITION: SAME AS C375	EA		REF									3-10	1A2R50
P	D		5905-185-8510							D	C418 RESISTOR, FIXED, COMPOSITION: SAME AS A301	EA		REF									3-10	1A2R51
P	D		5905-279-3506							D	C419 RESISTOR, FIXED, COMPOSITION: SAME AS A159	EA		REF									3-10	1A2R53

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
				MODEL											DS			GS						
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-20	(B) 21-50	(C) 51-100	(A) 1-20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5905-195-6791							D	C420 RESISTOR, FIXED, COMPOSITION: SAME AS B875	EA		1									3-10	1A2R54
P	D		5905-279-2616							D	C421 RESISTOR, FIXED, COMPOSITION: SAME AS B872	EA		2									3-10	1A2R55
P	D		5905-279-2616							D	C422 RESISTOR, FIXED, COMPOSITION: SAME AS B872	EA		REF									3-10	1A2R56
P	D		5905-190-8880							D	C423 RESISTOR, FIXED, COMPOSITION: SAME AS C385	EA		REF									3-10	1A2R57
P	D		5905-279-3506							D	C424 RESISTOR, FIXED, COMPOSITION: SAME AS A159	EA		REF									3-10	1A2R58
P	D		5905-279-3519							D	C425 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF220J	EA		2							13	14	3-10	1A2R59
P	D		5905-279-3519							D	C426 RESISTOR, FIXED, COMPOSITION: SAME AS C425	EA		REF									3-10	1A2R60
P	D		5905-195-5546							D	C427 RESISTOR, FIXED, COMPOSITION: SAME AS B994	EA		1									3-10	1A2R61
P	D		5905-845-9431							D	C428 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF4R7J	EA		1							8	7	3-10	1A2R62
P	D		5905-190-8889							D	C429 RESISTOR, FIXED, COMPOSITION: SAME AS A304	EA		2									3-10	1A2R63
P	D		5905-190-8889							D	C430 RESISTOR, FIXED, COMPOSITION: SAME AS A304	EA		REF									3-10	1A2R64
P	D		5905-542-7819							D	C431 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF5R6J	EA		1							8	7	3-10	1A2R67
P	D		5905-195-6453							D	C432 RESISTOR, FIXED, COMPOSITION: SAME AS B997	EA		REF									3-10	1A2R68
P	D		5905-195-6453							D	C433 RESISTOR, FIXED, COMPOSITION: SAME AS B997	EA		REF									3-10	1A2R69
P	D		5905-279-1757							D	C434 RESISTOR, FIXED, COMPOSITION: SAME AS A303	EA		1									3-10	1A2R70
P	D		5905-279-1876							D	C435 RESISTOR, FIXED, COMPOSITION: SAME AS B874	EA		1									3-10	1A2R71

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5905-195-6806							D	C436 RESISTOR, FIXED, COMPOSITION: SAME AS A307	EA		REF									3-10	1A2R72
P	D		5905-903-0773							D	C437 RESISTOR, VARIABLE: SAME AS A421	EA		3									3-10	1A2R11
P	D		5905-903-0773							D	C438 RESISTOR, VARIABLE: SAME AS A421	EA		REF									3-10	1A2R24
P	D		5905-903-0773							D	C439 RESISTOR, VARIABLE: SAME AS A421	EA		REF									3-10	1A2R38
P	D		5905-088-8851							D	C440 RESISTOR, VARIABLE: 96791; 2610P501	EA		1							8	7	3-10	1A2R66
P	D		5961-767-9412							D	C441 SEMICONDUCTOR DEVICE, DIODE: SAME AS B636	EA		1									3-10	1A2CR1
P	D		5961-836-6667							D	C442 SEMICONDUCTOR DEVICE, DIODE: SAME AS C145	EA		5									3-10	1A2CR2
P	D		5961-556-2091							D	C443 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		10									3-10	1A2CR3
P	D		5961-556-2091							D	C444 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-10	1A2CR4
P	D		5961-556-2091							D	C445 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-10	1A2CR5
P	D		5961-556-2091							D	C446 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-10	1A2CR6
P	D		5961-556-2091							D	C447 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-10	1A2CR7
P	D		5961-556-2091							D	C448 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-10	1A2CR8
P	D		5961-556-2091							D	C449 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-10	1A2CR9
P	D		5961-556-2091							D	C450 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-10	1A2CR10
P	D		5961-556-2091							D	C451 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-10	1A2CR11
P	D		5961-836-6667							D	C452 SEMICONDUCTOR DEVICE, DIODE: SAME AS C145	EA		REF									3-10	1A2CR12

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5961-836-6667							D	C453 SEMICONDUCTOR DEVICE, DIODE: SAME AS C145	EA		REF									3-10	1A2CR13
P	D		5961-836-6667							D	C454 SEMICONDUCTOR DEVICE, DIODE: SAME AS C145	EA		REF									3-10	1A2CR14
P	D		5961-836-6667							D	C455 SEMICONDUCTOR DEVICE, DIODE: SAME AS C145	EA		REF									3-10	1A2CR15
P	D		5961-556-2091							D	C456 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-10	1A2CR16
X2	D		5940-660-3759							D	C457 TERMINAL, STUD: SAME AS A430	EA		10									3-10	1A2E81
X2	D		5940-660-3759							D	C458 TERMINAL, STUD: SAME AS A430	EA		REF									3-10	1A2E83
X2	D		5940-660-3759							D	C459 TERMINAL, STUD: SAME AS A430	EA		REF									3-10	1A2E84
X2	D		5940-660-3759							D	C460 TERMINAL, STUD: SAME AS A430	EA		REF									3-10	1A2E85
X2	D		5940-660-3759							D	C461 TERMINAL, STUD: SAME AS A430	EA		REF									3-10	1A2E86
X2	D		5940-660-3759							D	C462 TERMINAL, STUD: SAME AS A430	EA		REF									3-10	1A2E87
X2	D		5940-660-3759							D	C463 TERMINAL, STUD: SAME AS A430	EA		REF									3-10	1A2E88
X2	D		5940-660-3759							D	C464 TERMINAL, STUD: SAME AS A430	EA		REF									3-10	1A2E89
X2	D		5940-660-3759							D	C465 TERMINAL, STUD: SAME AS A430	EA		REF									3-10	1A2E90
X2	D		5940-660-3759							D	C466 TERMINAL, STUD: SAME AS A430	EA		REF									3-10	1A2E91
P	D		5950-498-2068							D	C467 TRANSFORMER, INTERMEDIATE FREQUENCY: 14304; 162-0156	EA		1							8	7	3-10	1A2T2
P	D		5950-239-2966							D	C468 TRANSFORMER, INTERMEDIATE FREQUENCY: 14304; 162-0157	EA		2							13	14	3-10	1A2T3
P	D		5950-239-2966							D	C469 TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS C468	EA		REF									3-10	1A2T4
P	D		5961-912-9008							D	C470 TRANSISTOR: SAME AS B777	EA		3									3-10	1A2Q1
P	D		5961-912-9008							D	C471 TRANSISTOR: SAME AS B777	EA		REF									3-10	1A2Q2
P	D		5961-912-9008							D	C472 TRANSISTOR: SAME AS B777	EA		REF									3-10	1A2Q3
P	D		5961-842-6937							D	C473 TRANSISTOR: SAME AS B899	EA		5									3-10	1A2Q4

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
					MODEL										DS			GS						
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1 - 20	(B) 21-50	(C) 51-100	(A) 1 - 20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5961-820-9059							D	C474 TRANSISTOR: 16736; 2N1301	EA		8							40	120	3-10	1A2Q5
P	D		5961-820-9059							D	C475 TRANSISTOR: SAME AS C474	EA		REF									3-10	1A2Q6
P	D		5961-820-9059							D	C476 TRANSISTOR: SAME AS C474	EA		REF									3-10	1A2Q7
P	D		5961-842-6937							D	C477 TRANSISTOR: SAME AS B899	EA		REF									3-10	1A2Q8
P	D		5961-820-9059							D	C478 TRANSISTOR: SAME AS C474	EA		REF									3-10	1A2Q9
P	D		5961-820-9059							D	C479 TRANSISTOR: SAME AS C474	EA		REF									3-10	1A2Q10
P	D		5961-820-9059							D	C480 TRANSISTOR: SAME AS C474	EA		REF									3-10	1A2Q11
P	D		5961-842-6937							D	C481 TRANSISTOR: SAME AS B899	EA		REF									3-10	1A2Q12
P	D		5961-820-9059							D	C482 TRANSISTOR: SAME AS C474	EA		REF									3-10	1A2Q13
P	D		5961-842-6937							D	C483 TRANSISTOR: SAME AS B899	EA		REF									3-10	1A2Q14
P	D		5961-820-9059							D	C484 TRANSISTOR: SAME AS C474	EA		REF									3-10	1A2Q15
P	D		5961-998-1920							D	C485 TRANSISTOR: SAME AS A441	EA		4									3-10	1A2Q16
P	D		5961-998-1920							D	C486 TRANSISTOR: SAME AS A441	EA		REF									3-10	1A2Q17
P	D		5961-998-1920							D	C487 TRANSISTOR: SAME AS A441	EA		REF									3-10	1A2Q18
P	D		5961-998-1920							D	C488 TRANSISTOR: SAME AS A441	EA		REF									3-10	1A2Q19
P	D		5961-842-6937							D	C489 TRANSISTOR: SAME AS B899	EA		REF									3-10	1A2Q20
X2	F		5940-959-3991							C	C490 TERMINAL BOARD: 71785; 51C	EA		1										
X2	F									C	C491 TERMINAL BOARD: 00853; 56110	EA		1										
X2	F		5305-984-4983							*	C491A SCREW, MACHINE: SAME AS A053	EA		1										
X2	F		5310-515-7997							*	C491B WASHER, LOCK: SAME AS A054	EA		1										
X2	F									C	C492 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		26										
X2	F		5305-889-3116							*	C493 SCREW, MACHINE: SAME AS A041	EA		1										
X2	F		5310-515-7999							*	C494 WASHER, LOCK: SAME AS A042	EA		1										

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									C	C495 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F		5305-889-3116							*	C496 SCREW, MACHINE: SAME AS A041	EA		1										
X2	F		5310-515-7999							*	C497 WASHER, LOCK: SAME AS A042	EA		1										
X2	F									C	C498 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F		5305-889-3116							*	C499 SCREW, MACHINE: SAME AS A041	EA		1										
X2	F		5310-515-7999							*	C500 WASHER, LOCK: SAME AS A042	EA		1										
X2	F									C	C501 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C502 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C503 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C504 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C505 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C506 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C507 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C508 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C509 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C510 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C511 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C512 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C513 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C514 SCREW, MACHINE: SAME AS B359	EA		1										

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	(3) MODEL 1	2	3	4	5	6	IND CD	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1 - 20	DS (B) 21-50	DS (C) 51-100	GS (A) 1 - 20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
X2	F									C	C515 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C516 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C517 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C518 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C519 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C520 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C521 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C522 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C523 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C524 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C525 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C526 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C527 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C528 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C529 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C530 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C531 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C532 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C533 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										

(1) SOURCE CD (A)	MAINT. CD (B)	REC. CODE (C)	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									*	C534 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C535 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C536 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C537 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C538 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C539 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C540 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C541 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C542 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C543 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C544 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C545 TERMINAL, FEEDTHRU, INSULATED: SAME AS A799	EA		REF										
X2	F									*	C546 SCREW, MACHINE: SAME AS B359	EA		1										
X2	F									C	C547 TERMINAL, LUG: SAME AS A581	EA		25										
X2	F									C	C548 TERMINAL, LUG: SAME AS A581	EA		REF										
X2	F									C	C549 TERMINAL, LUG: SAME AS A581	EA		REF										
X2	F									C	C550 TERMINAL, LUG: SAME AS A581	EA		REF										
X2	F									C	C551 TERMINAL, LUG: SAME AS A581	EA		REF										
X2	F									C	C552 TERMINAL, LUG: SAME AS A581	EA		REF										
X2	F									C	C553 TERMINAL, LUG: SAME AS A581	EA		REF										
X2	F									C	C554 TERMINAL, LUG: SAME AS A581	EA		REF										

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE										(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
					MODEL											DS			GS						
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-20	(B) 21-50	(C) 51-100	(A) 1-20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									C	C555	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C556	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C557	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C558	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C559	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C560	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C561	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C562	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C563	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C564	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C565	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C566	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C567	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C568	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C569	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C570	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C571	TERMINAL, LUG: SAME AS A581	EA		REF									
X2	F									C	C572	TERMINAL, LUG: SAME AS A236	EA		7									
X2	F									C	C573	TERMINAL, LUG: SAME AS A236	EA		REF									
X2	F									C	C574	TERMINAL, LUG: SAME AS A236	EA		REF									
X2	F									C	C575	TERMINAL, LUG: SAME AS A236	EA		REF									
X2	F									C	C576	TERMINAL, LUG: SAME AS A236	EA		REF									
X2	F									C	C577	TERMINAL, LUG: SAME AS A236	EA		REF									
X2	F									C	C578	TERMINAL, LUG: SAME AS A236	EA		REF									

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	(B) 21-50	(C) 51-100	GS (A) 1-20	(B) 21-50	(C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									C	C579 TERMINAL, LUG: SAME AS A268	EA		4										
X2	F									C	C580 TERMINAL, LUG: SAME AS A268	EA		REF										
X2	F									C	C581 TERMINAL, LUG: SAME AS A268	EA		REF										
X2	F									C	C582 TERMINAL, LUG: SAME AS A268	EA		REF										
X2	F									C	C583 TERMINAL, LUG: SAME AS A271	EA		1										
X2	F									C	C584 TERMINAL, STUD: 71279; 1775A	EA		1										
X2	F									C	C585 THUMBSCREW: 14304; 162-0333	EA		1										
P	F		5950-910-0175							C	C586 TRANSFORMER, POWER, STEP DOWN, STEP UP: 14304; 162-0175	EA		1	*	*	2	*	*	2	8	7	2-2	1T1
X2	F									*	C586A SCREW, MACHINE: SAME AS A031	EA		4										
P	F		5950-910-8242							C	C587 TRANSFORMER, RADIO FREQUENCY: 14304; 162-0177	EA		1	*	*	2	*	*	2	8	7		
X2	F		5310-969-6959							*	C587A NUT, ASSEMBLED WASHER: SAME AS A029	EA		2										
X2	F									*	C587B SCREW, MACHINE: SAME AS A753	EA		2										
P	F		5961-465-6555							C	C587C TRANSISTOR: 07263; 2N3642	EA		1	*	*	*	*	*	*	8	6		1Q3
P	F	S	5820-135-0376							C	C588 TRANSLATOR, SIGNAL DATA: 14304; 162-0600	EA		1	2	5	10	4	3	3	113	3	3-22	1A6
X2	F		5305-889-3116							*	C589 SCREW, MACHINE: SAME AS A041	EA		2									3-22	1A6H2
X2	F		5310-782-1349							*	C590 WASHER, FLAT: SAME AS A111	EA		2									3-22	1A6H2
X2	F		5310-515-7999							*	C591 WASHER, LOCK: SAME AS A042	EA		2									3-22	1A6H2
P	D		5910-401-6254							D	C592 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		19									3-22	1A6C1
P	D		5910-401-6254							D	C593 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C3
P	D		5910-401-6254							D	C594 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C5
P	D		5910-401-6254							D	C595 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C6

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	D		5910-401-6254							D	C596 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C7
P	D		5910-401-6254							D	C597 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C8
P	D		5910-401-6254							D	C598 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C9
P	D		5910-401-6254							D	C599 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C11
P	D		5910-401-6254							D	C600 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C12
P	D		5910-401-6254							D	C601 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C14
P	D		5910-401-6254							D	C602 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C15
P	D		5910-401-6254							D	C603 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C16
P	D		5910-401-6254							D	C604 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C18
P	D		5910-401-6254							D	C605 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C21
P	D		5910-401-6254							D	C606 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C23
P	D		5910-401-6254							D	C607 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C24
P	D		5910-401-6254							D	C608 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C26
P	D		5910-401-6254							D	C609 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C29
P	D		5910-401-6254							D	C610 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A323	EA		REF									3-22	1A6C30
P	D		5910-934-2865							D	C611 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		3									3-22	1A6C4

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5910-934-2865							D	C612 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-22	1A6C17
P	D		5910-934-2865							D	C613 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS A290	EA		REF									3-22	1A6C25
P	D		5910-851-3328							D	C614 CAPACITOR, FIXED, MICA DIELECTRIC: SAME AS A356	EA		1									3-22	1A6C28
P	D		5910-051-6919							D	C615 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B426	EA		3									3-22	1A6C2
P	D									D	C616 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B429	EA		4									3-22	1A6C10
P	D									D	C617 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B429	EA		REF									3-22	1A6C13
P	D		5910-051-6919							D	C618 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B426	EA		REF									3-22	1A6C19
P	D									D	C619 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B429	EA		REF									3-22	1A6C20
P	D									D	C620 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B429	EA		REF									3-22	1A6C22
P	D		5910-051-6919							D	C621 CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: SAME AS B426	EA		REF									3-22	1A6C27
P	D		5950-088-1720							D	C622 COIL, RADIO FREQUENCY: SAME AS A366	EA		5									3-22	1A6L1
P	D		5950-061-8260							D	C623 COIL, RADIO FREQUENCY: 99800; 2500-08	EA		1							8	6	3-22	1A6L2
P	D		5950-088-1720							D	C624 COIL, RADIO FREQUENCY: SAME AS A366	EA		REF									3-22	1A6L3
P	D		5950-088-1720							D	C625 COIL, RADIO FREQUENCY: SAME AS A366	EA		REF									3-22	1A6L4
P	D		5950-088-1720							D	C626 COIL, RADIO FREQUENCY: SAME AS A366	EA		REF									3-22	1A6L5
P	D		5950-088-1720							D	C627 COIL, RADIO FREQUENCY: SAME AS A366	EA		REF									3-22	1A6L6
P	D		5935-704-3506							D	C628 CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		5									3-22	1A6J7
P	D		5935-704-3506							D	C629 CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		REF									3-22	1A6J8

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
															DS			GS						
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION		UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1 - 20	(B) 21-50	(C) 51-100	(A) 1 - 20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5935-704-3506							D	C630	CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		REF								3-22	1A6J9
P	D		5935-704-3506							D	C631	CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		REF								3-22	1A6J10
P	D		5935-704-3506							D	C632	CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS A368	EA		REF								3-22	1A6J11
P	D		5955-462-8455							D	C633	CRYSTAL UNIT QUARTZ: 14304; Y0641	EA		1							10	4	3-22	1A6Y1
P	D		5915-910-2873							D	C634	FILTER, BAND PASS: 14304; FL0108	EA		1							4	7	3-22	1A6FL1
X2	D									*	C635	NUT, PLAIN, HEXAGON: SAME AS A194	EA		2									3-22	1A6H2
X2	D		5310-933-8118							*	C636	WASHER, LOCK: SAME AS A860	EA		2									3-22	1A6H2
P	D		5915-910-2871							D	C637	FILTER, BAND PASS: 14304; FL0106	EA		1							4	7	3-22	1A6FL2
X2	D									*	C638	NUT, PLAIN HEXAGON: SAME AS A194	EA		3									3-22	1A6H3
X2	D		5310-933-8118							*	C639	WASHER, LOCK: SAME AS A860	EA		3									3-22	1A6H3
X2	D									D	C640	PLATE, ELECTRICAL SHIELD: 14304; 162-0606	EA		1									3-22	1A6MP1
X2	D									D	C641	PLATE, ELECTRICAL SHIELD: 14304; 162-0607	EA		2									3-22	1A6MP2
X2	D									D	C642	PLATE, ELECTRICAL SHIELD: SAME AS C641	EA		REF									3-22	1A6MP3
X2	D									D	C643	PRINTED WIRING BOARD: 14304; 162-0609	EA		1									3-22	1A6MP4
P	D		5905-686-3798							D	C644	RESISTOR, FIXED, COMPOSITION: SAME AS A389	EA		3									3-22	1A6R1
P	D		5905-723-5251							D	C645	RESISTOR, FIXED, COMPOSITION: SAME AS B479	EA		5									3-22	1A6R2
P	D		5905-802-6730							D	C646	RESISTOR, FIXED, COMPOSITION: 81349; RC07GF470J	EA		3	*	*	1	*	*	1	13	6	3-22	1A6R3
P	D		5905-723-5251							D	C647	RESISTOR, FIXED, COMPOSITION: SAME AS B479	EA		REF									3-22	1A6R4
P	D		5905-683-2236							D	C648	RESISTOR, FIXED, COMPOSITION: SAME AS A391	EA		3									3-22	1A6R5

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	D		5905-723-5251							D	C649 RESISTOR, FIXED, COMPOSITION: SAME AS B479	EA		REF									3-22	1A6R6
P	D		5905-683-2236							D	C650 RESISTOR, FIXED, COMPOSITION: SAME AS A391	EA		REF									3-22	1A6R7
P	D		5905-686-3798							D	C651 RESISTOR, FIXED, COMPOSITION: SAME AS A389	EA		REF									3-22	1A6R8
P	D		5905-723-5251							D	C652 RESISTOR, FIXED, COMPOSITION: SAME AS B479	EA		REF									3-22	1A6R9
P	D		5905-802-6730							D	C653 RESISTOR, FIXED, COMPOSITION: SAME AS C646	EA		REF									3-22	1A6R10
P	D		5905-683-7723							D	C654 RESISTOR, FIXED, COMPOSITION: SAME AS A394	EA		1									3-22	1A6R11
P	D		5905-688-3738							D	C655 RESISTOR, FIXED, COMPOSITION: SAME AS B719	EA		1									3-22	1A6R12
P	D		5905-686-3798							D	C656 RESISTOR, FIXED, COMPOSITION: SAME AS A389	EA		REF									3-22	1A6R13
P	D		5905-723-5251							D	C657 RESISTOR, FIXED, COMPOSITION: SAME AS B479	EA		REF									3-22	1A6R14
P	D		5905-802-6730							D	C658 RESISTOR, FIXED, COMPOSITION: SAME AS C646	EA		REF									3-22	1A6R15
P	D		5905-686-9994							D	C659 RESISTOR, FIXED, COMPOSITION: SAME AS A390	EA		2									3-22	1A6R16
P	D		5905-686-9994							D	C660 RESISTOR, FIXED, COMPOSITION: SAME AS A390	EA		REF									3-22	1A6R17
P	D		5905-681-8818							D	C661 RESISTOR, FIXED, COMPOSITION: SAME AS A378	EA		1									3-22	1A6R18
P	D		5905-683-2238							D	C662 RESISTOR, FIXED, COMPOSITION: SAME AS A372	EA		1									3-22	1A6R19
P	D		5905-683-2236							D	C663 RESISTOR, FIXED, COMPOSITION: SAME AS A391	EA		REF									3-22	1A6R20
P	D		5961-556-2091							D	C664 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		16									3-22	1A6CR1

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
				MODEL											DS			GS						
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-20	(B) 21-50	(C) 51-100	(A) 1-20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	D		5961-556-2091							D	C665 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR2
P	D		5961-556-2091							D	C666 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR3
P	D		5961-556-2091							D	C667 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR4
P	D		5961-556-2091							D	C668 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR5
P	D		5961-556-2091							D	C669 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR6
P	D		5961-556-2091							D	C670 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR7
P	D		5961-556-2091							D	C671 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR8
P	D		5961-556-2091							D	C672 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR9
P	D		5961-556-2091							D	C673 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR10
P	D		5961-556-2091							D	C674 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR11
P	D		5961-556-2091							D	C675 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR12
P	D		5961-556-2091							D	C676 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR13
P	D		5961-556-2091							D	C677 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR14
P	D		5961-556-2091							D	C678 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR15
P	D		5961-556-2091							D	C679 SEMICONDUCTOR DEVICE, DIODE: SAME AS A423	EA		REF									3-22	1A6CR16
X2	D		5940-660-3759							D	C680 TERMINAL, STUD: SAME AS A430	EA		6									3-22	1A6E61
X2	D		5940-660-3759							D	C681 TERMINAL, STUD: SAME AS A430	EA		REF									3-22	1A6E62

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
X2	D		5940-660-3759							D	C682 TERMINAL, STUD: SAME AS A430	EA		REF									3-22	1A6E3
X2	D		5940-660-3759							D	C683 TERMINAL, STUD: SAME AS A430	EA		REF									3-22	1A6E188
X2	D		5940-660-3759							D	C684 TERMINAL, STUD: SAME AS A430	EA		REF									3-22	1A6E189
X2	D		5940-660-3759							D	C685 TERMINAL, STUD: SAME AS A430	EA		REF									3-22	1A6E190
P	D		5961-105-9716							D	C686 TRANSISTOR: SAME AS B529	EA		3									3-22	1A6Q1
P	D		5961-105-9716							D	C687 TRANSISTOR: SAME AS B529	EA		REF									3-22	1A6Q2
P	D		5961-105-9716							D	C688 TRANSISTOR: SAME AS B529	EA		REF									3-22	1A6Q3
P	D		5950-498-2072							D	C689 TRANSFORMER, INTERMEDIATE FREQUENCY: SAME AS A431	EA		1									3-22	1A6T1
X2	F									C	C690 WASHER, NONMETALLIC: 14304; 162-0332	EA		1										1 MP149
P	F		6625-135-6710							C	C691 WATTMETER: 14304; 162-0184	EA		1	*	*	*	*	*	*	4	6	2-2	1M1
X2	F									C	C692 WIRE MESH, KNITTED: 14304; 162-0124	EA		1									2-3	1MP150
A	F	S								A	C693 CHOPPER, ELECTRONIC: CV-2486/URC	EA		1									3-50	9
X2	F		5305-889-3116							*	C694 SCREW, MACHINE: SAME AS A041	EA		2										
X2	F		5305-984-4983							*	C695 SCREW, MACHINE: SAME AS A053	EA		2										
X2	F		5310-515-7999							*	C696 WASHER, LOCK: SAME AS A042	EA		2										
X2	F									*	C697 WASHER, LOCK: 73734; 1304	EA		2										
M	D									B	C698 BRACKET, ANGLE: 14304; 162-1807	EA		1										
X2	F		5305-993-0190							*	C699 SCREW, MACHINE: SAME AS A139	EA		2										
X2	F		5310-515-7999							*	C700 WASHER, LOCK: SAME AS A042	EA		2										
P	F		5910-957-6843							B	C701 CAPACITOR, FIXED, ELECTROLYTIC: 81349; C165BH151MP3	EA		2	*	2	2	*	*	2	13	16	3-50	901
P	F		5910-957-6843							B	C702 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS C701	EA		REF									3-50	902
M	D									B	C703 CHASSIS, ELECT EQUIPMENT: 14304; 162-1804	EA		1										

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	(3) MODEL 1	2	3	4	5	6	IND CD	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	C		5920-012-0151							B	C703A FUSE, CARTRIDGE: SAME AS B222	EA		1	2	3	6	3	2	2	71	75	12 3-2	9F2
X2	F									B	C704 INSULATOR, DISK: 14304; E0015	EA		2										
X2	F									B	C705 INSULATOR, DISK: SAME AS C704	EA		REF										
X2	F									B	C706 INSULATOR, DISK: 14304; E0006	EA		4										
X2	F									B	C707 INSULATOR, DISK: SAME AS C706	EA		REF										
X2	F									B	C708 INSULATOR, DISK: SAME AS C706	EA		REF										
X2	F									B	C709 INSULATOR, DISK: SAME AS C706	EA		REF										
P	F		5945-578-9991							B	C710 RELAY, ARMATURE: 77342; MB3DK24V	EA		1	*	*	2	*	*	2	8	9	3-50	9K1
X2	F		5310-969-6959							*	C711 NUT, ASSEMBLED WASHER: SAME AS A029	EA		3										
P	F		5905-903-0767							B	C712 RESISTOR, FIXED, WIREWOUND: 02985; TS10W2R7J	EA		1	*	*	2	*	*	2	8	12	3-50	9R1
P	F									B	C713 RESISTOR, FIXED, WIREWOUND: 02985; TS10W2R0J	EA		1	*	*	2	*	*	2	8	12	3-50	9R2
P	F									B	C714 RESISTOR, FIXED, WIREWOUND: 02985; TS5W221K	EA		1	*	*	2	*	*	2	8	12	3-50	9R3
P	F		5961-921-3781							B	C715 SEMICONDUCTOR DEVICE, DIODE: SAME AS C143	EA		4									3-50	9CR1
P	F		5961-921-3781							B	C716 SEMICONDUCTOR DEVICE, DIODE: SAME AS C143	EA		REF									3-50	9CR2
P	F		5961-921-3781							B	C717A SEMICONDUCTOR DEVICE, DIODE: SAME AS C143	EA		REF									3-50	9CR3
P	F		5961-921-3781							B	C718A SEMICONDUCTOR DEVICE, DIODE: SAME AS C143	EA		REF									3-50	9CR4
P	F		5961-921-3781							B	C718B SEMICONDUCTOR DEVICE, DIODE: 80131; 1N1371A	EA		1	*	2	2	*	*	2	13	30	3-50	9CR5

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									B	C719 TERMINAL, FEEDTHRU, INSULATED: 17117; 2308-91-5	EA		1										
X2	F		5305-889-3116							*	C720 SCREW, MACHINE: SAME AS A041	EA		1										
X2	F		5310-515-7999							*	C721 WASHER, LOCK: SAME AS A042	EA		1										
X2	F									B	C722 TERMINAL, LUG: SAME AS A581	EA		1										
X2	F		5940-951-3922							B	C723 TERMINAL, FEEDTHRU: 98291; FT900SL	EA		8										
X2	F		5940-951-3922							B	C724 TERMINAL, FEEDTHRU: SAME AS C723	EA		REF										
X2	F		5940-951-3922							B	C725 TERMINAL, FEEDTHRU: SAME AS C723	EA		REF										
X2	F		5940-951-3922							B	C726 TERMINAL, FEEDTHRU: SAME AS C723	EA		REF										
X2	F		5940-951-3922							B	C727 TERMINAL, FEEDTHRU: SAME AS C723	EA		REF										
X2	F		5940-951-3922							B	C728 TERMINAL, FEEDTHRU: SAME AS C723	EA		REF										
X2	F		5940-951-3922							B	C729 TERMINAL, FEEDTHRU: SAME AS C723	EA		REF										
X2	F		5940-951-3922							B	C730 TERMINAL, FEEDTHRU: SAME AS C723	EA		REF										9E10
P	F									B	C731 TRANSFORMER AUDIO FREQUENCY: 14304; 162-0171	EA		1	*	*	2	*	*	2	8	7	3-50	9T1
X2	F		5310-655-6534							*	C732 NUT, ASSEMBLED WASHER: SAME AS A021	EA		1									3-50	
P	F		5961-044-2606							B	C733 TRANSISTOR: 80131; 2N512B	EA		2	*	2	2	*	*	2	13	30	3-50	9Q1
X2	F									*	C734 NUT, ASSEMBLED WASHER: SAME AS A582	EA		2									3-50	
X2	F		5305-889-2998							*	C735 SCREW, MACHINE: 96906; MS35206-216	EA		2									3-50	
X2	F									*	C736 WASHER, FLAT: SAME AS A623	EA		2									3-50	
P	F		5961-044-2606							B	C737 TRANSISTOR: SAME AS C733	EA		REF									3-50	9Q2
X2	F									*	C738 NUT, ASSEMBLED WASHER: SAME AS A582	EA		2										
X2	F		5305-889-2998							*	C739 SCREW, MACHINE: SAME AS C735	EA		2										
X2	F									*	C740 WASHER, FLAT: SAME AS A623	EA		2										
A	F	R								A	C741 CHOPPER, ELECTRONIC: CV-2487/URC	EA		1									3-51	

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F		5305-889-3116							*	C742 SCREW, MACHINE: SAME AS A041	EA		2										
X2	F		5305-984-4983							*	C743 SCREW, MACHINE: SAME AS A053	EA		2										
X2	F		5310-515-7999							*	C744 WASHER, LOCK: SAME AS A042	EA		2										
X2	F									*	C745 WASHER, LOCK: SAME AS C697	EA		2										
M	D									B	C746 BRACKET, ANGLE: SAME AS C698	EA		1										
X2	F		5305-993-0190							*	C747 SCREW, MACHINE: SAME AS A139	EA		2										
X2	F		5310-515-7999							*	C748 WASHER, LOCK: SAME AS A042	EA		2										
P	F		5910-270-9083							B	C749 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A991	EA		2							13	12	3-51	10C4
P	F		5910-270-9083							B	C750 CAPACITOR, FIXED, CERAMIC DIELECTRIC: SAME AS A991	EA		REF									3-51	10C5
P	F		5910-957-6843							B	C751 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS C701	EA		2							13	16	3-51	10C2
P	F		5910-957-6843							B	C752 CAPACITOR, FIXED, ELECTROLYTIC: SAME AS C701	EA		REF									3-51	10C3
P	F		5910-829-0249							B	C753 CAPACITOR, FIXED, PLASTIC DIELECTRIC: 93790; WMF1P47	EA		1	*	*	2	*	*	2	8	8	3-51	10C1
M	D									B	C754 CHASSIS, ELECTRICAL EQUIPMENT: 14304; 162-1804	EA		1										
P	C		5920-681-4353							B	C755 FUSE, CARTRIDGE: 75915; 311025	EA		1	2	3	6	3	2	2	71	75	12 3-2	10F2
X2	F									B	C756 INSULATOR, DISK: 96172; 759	EA		2										
X2	F									B	C757 INSULATOR, DISK: SAME AS C756	EA		REF										
P	F		5945-453-9436							B	C758 RELAY, ARMATURE: 77342; MB3DK12V	EA		1	*	*	2	*	*	2	8	9	3-51	10K1
X2	F		5310-969-6959							*	C759 NUT, ASSEMBLED WASHER: SAME AS A029	EA		3										
P	F		5905-279-2633							B	C760 RESISTOR, FIXED, COMPOSITION: 81349; RC42GF820J	EA		1	*	*	2	*	*	2	8	7	3-51	10R3
P	F		5905-903-0767							B	C761 RESISTOR, FIXED, WIREWOUND: SAME AS C712	EA		1							8	12	3-51	10W1

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD		(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
P	F									B	C762	RESISTOR, FIXED, WIREWOUND: 02985; TS10W1R5J	EA		1	*	*	2	*	*	2	8	12	3-51	10R2
P	F		5961-921-3781							B	C763	SEMICONDUCTOR DEVICE, DIODE: SAME AS C143	EA		2									3-51	10CR1
P	F		5961-921-3781							B	C764	SEMICONDUCTOR DEVICE, DIODE: SAME AS C143	EA		REF									3-51	10CR2
X2	F									B	C765	TERMINAL, FEEDTHRU INSULATED: SAME AS C719	EA		1										
X2	F		5305-889-3116							*	C766	SCREW, MACHINE: SAME AS A041	EA		1										
X2	F		5310-515-7999							*	C767	WASHER, LOCK: SAME AS A042	EA		1										
X2	F		5940-617-2896							B	C768	TERMINAL, LUG: 00779; 36160	EA		2										
X2	F		5940-617-2896							B	C769	TERMINAL, LUG: SAME AS C768	EA		REF										
X2	F									B	C770	TERMINAL, LUG: 79963; 121-000	EA		2										
X2	F									B	C771	TERMINAL, LUG: SAME AS C770	EA		REF										
X2	F		5940-951-3922							B	C772	TERMINAL, FEEDTHRU: SAME AS C723	EA		8										
X2	F		5940-951-3922							B	C773	TERMINAL, FEEDTHRU: SAME AS C723	EA		REF										
X2	F		5940-951-3922							B	C774	TERMINAL, FEEDTHRU: SAME AS C723	EA		REF										
X2	F		5940-951-3922							B	C775	TERMINAL, FEEDTHRU: SAME AS C723	EA		REF										
X2	F		5940-951-3922							B	C776	TERMINAL, FEEDTHRU: SAME AS C723	EA		REF										
X2	F		5940-951-3922							B	C777	TERMINAL, FEEDTHRU: SAME AS C723	EA		REF										
X2	F		5940-951-3922							B	C778	TERMINAL, FEEDTHRU: SAME AS C723	EA		REF										
X2	F		5940-951-3922							B	C779	TERMINAL, FEEDTHRU: SAME AS C723	EA		REF										
P	F		5950-910-4153							B	C780	TRANSFORMER, AUDIO FREQUENCY: 14304; 162-0170	EA		1	*	*	2	*	*	2	8	7	3-51	10T1
X2	F		5310-655-6534							*	C781	NUT, ASSEMBLED WASHER: SAME AS A021	EA		1										
P	F									B	C782	TRANSISTOR: 21845; MHT1851	EA		2	*	2	2	*	*	2	13	30	3-51	10Q1

(1) SOURCE CD (A)	(1) MAINT. CD (B)	(1) REC. CODE (C)	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) ILLUSTRATIONS (B) ITEM OR SYMBOL NUMBER
P	F									B	C783 TRANSISTOR: SAME AS C782	EA		REF									3-51	10Q2
X2	F		5310-551-6308							B	C784 WASHER, LOCK: SAME AS B329	EA		1										
X2	F		5310-551-6308							B	C785 WASHER, LOCK: SAME AS B329	EA		1										
A	F	S								A	C786 CONTROL, RADIO SET: C-7648/GRC-165	EA		1									12 1-2	
P	F	S	5820-135-0392							B	C787 AMPLIFIER, AUDIO FREQUENCY: SAME AS A288	EA		1									3-46	11A1
P	F		5910-225-7331							C	C788 CAPACITOR, FIXED, CERAMIC DIELECTRIC: 71590; UK10-474	EA		1	*	*	2	*	*	2	8	6	3-46	11A1C2
P	F		5910-734-2865							C	C789 CAPACITOR, FIXED, ELECTROLYTIC: 05079; S15-20C2MI	EA		1	*	*	2	*	*	2	8	8	3-46	11A1C1
P	F		5910-018-1944							C	C790 CAPACITOR, FIXED, ELECTROLYTIC: 05079; S33-10C2MI	EA		1	*	*	2	*	*	2	8	8	3-46	11A1C3
P	F		5910-927-2836							C	C791 CAPACITOR, FIXED, ELECTROLYTIC: 56289; 600D587G015DL0	EA		1	*	*	2	*	*	2	8	8	3-46	11A1C4
P	F		5910-835-2718							C	C792 CAPACITOR, FIXED, PLASTIC DIELECTRIC: 93790; WMF1S22	EA		1	*	*	2	*	*	2	8	9	3-46	11A1C5
P	F		5935-909-5712							C	C793 CONTACT ASSEMBLY, ELECTRICAL: 91662; 02-004-113-6200	EA		1	*	*	2	*	*	2	8	4	3-46	11A1J1
P	F									C	C794 HEAT SINK, ELECTRICAL ELECTRONIC COMPONENT: 14304; 162-1726	EA		1	*	*	2	*	*	2	8	13		
X2	F		5310-063-8761							*	C795 NUT, PLAIN, HEXAGON: SAME AS A296	EA		2										
X2	F		5305-889-2997							*	C796 SCREW, MACHINE: SAME AS A297	EA		2										
X2	F		5310-515-7999							*	C797 WASHER, LOCK: SAME AS A042	EA		2										
X2	F									C	C798 PRINTED WIRING BOARD: SAME AS A299	EA		1										
P	F		5905-299-1971							C	C799 RESISTOR, FIXED, COMPOSITION: SAME AS C192	EA		1									3-46	11A1R1
P	F		5905-185-8510							C	C800 RESISTOR, FIXED, COMPOSITION: SAME AS C184	EA		1									3-46	11A1R2

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
				MODEL											DS			GS						
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	(A) 1-20	(B) 21-50	(C) 51-100	(A) 1-20	(B) 21-50	(C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	F		5905-279-3506							C	C801 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF332J	EA		1	*	*	2	*	*	2	8	7	3-46	11A1R3
P	F		5905-841-7461							C	C802 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF152J	EA		1	*	*	2	*	*	2	8	7	3-46	11A1R4
P	F		5905-190-8889							C	C803 RESISTOR, FIXED, COMPOSITION: SAME AS C185	EA		1									3-46	11A1R5
P	F		5905-192-4490							C	C804 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF330J	EA		1	*	*	2	*	*	2	8	7	3-46	11A1R6
P	F		5905-192-3973							C	C805 RESISTOR, FIXED, COMPOSITION: SAME AS C189	EA		1									3-46	11A1R7
P	F		5905-195-6806							C	C806 RESISTOR, FIXED, COMPOSITION: 81349; RC20GF102J	EA		1	*	2	2	*	*	2	13	14	3-46	11A1R8
P	F		5905-984-4868							C	C807 RESISTOR, FIXED, WIRE WOUND: 75042; BWHR27K	EA		2	*	2	2	*	*	2	13	24	3-46	11A1R9
P	F		5905-984-4868							C	C808 RESISTOR, FIXED, WIRE WOUND: SAME AS C807	EA		REF									3-46	11A1R10
P	F		5961-921-3781							C	C809 SEMICONDUCTOR DEVICE, DIODE: SAME AS C143	EA		1									3-46	11A1CR1
P	F		5961-929-2561							C	C810 TRANSISTOR: 07263; 2N3642	EA		2	*	2	2	*	*	2	13	30	3-46	11A1Q1
P	F		5961-901-4862							C	C811 TRANSISTOR: 07263; 2N3638	EA		2	*	2	2	*	*	2	13	30	3-46	11A1Q2
P	F		5961-929-2561							C	C812 TRANSISTOR: SAME AS C810	EA		REF									3-46	11A1Q3
P	F		5961-901-4862							C	C813 TRANSISTOR: SAME AS C811	EA		REF									3-46	11A1Q4
P	F		5961-728-6941							C	C814 TRANSISTOR: 04713; 2N4918	EA		1	*	*	2	*	*	2	8	15	3-46	11A1Q5
P			5961-058-1192							C	C815 TRANSISTOR: 04713; 2N4921	EA		1	*	*	2	*	*	2	8	15	3-46	11A1Q6
M	D									B	C816 BRACKET, DOUBLE ANGLE: 14304; 425-0029	EA		1										
X2	F									*	C817 THUMBSCREW: 14304; 110-0068	EA		2										
X2	F									*	C818 WASHER, THRUST: 14304; 110-0083	EA		2										
M	D									B	C819 BRACKET, DOUBLE ANGLE: 14304; 356-0028	EA		2										

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	(3) IND CD	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
X2	F		5310-969-6959							*	C820 NUT, ASSEMBLED WASHER: SAME AS A029	EA		2										
X2	F		5305-984-4984							*	C821 SCREW, MACHINE: SAME AS A065	EA		2										
M	D									B	C822 BRACKET, DOUBLE ANGLE: SAME AS C819	EA		REF										
X2	F		5310-969-6959							*	C823 NUT, ASSEMBLED WASHER: SAME AS A029	EA		2										
X2	F		5305-984-4984							*	C824 SCREW, MACHINE: SAME AS A065	EA		2										
M	D									B	C825 BRACKET, DOUBLE ANGLE: 14304; 162-0121	EA		1										
X2	F		5310-969-6959							*	C826 NUT, ASSEMBLED WASHER: SAME AS A029	EA		4										
X2	F		5305-984-4984							*	C827 SCREW, MACHINE: SAME AS C821	EA		4										
P	O	S	5995-042-5842							B	C827A CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL CX-10823/V (92 FT)	EA		1	*	*	2	*	*	2	8	13		
X2	F		6145-949-3331							C	C827B CABLE, SPECIAL PURPOSE, ELECTRICAL: 70903; 8777	FT		92										
P	F		5935-819-6784							C	C827C CONNECTOR, PLUG, ELECTRICAL: 11139; DM9728-12P	EA		2	*	2	2	*	2	2	13	28		
P	F		5935-819-6784							C	C827E CONNECTOR, PLUG, ELECTRICAL: SAME AS C827C	EA		REF										
M	D									B	C828 CHASSIS, ELECTRICAL EQUIPMENT: 14304; 425-0022	EA		1										
P	F		5935-910-4616							B	C829 CONNECTOR, RECEPTACLE, ELECTRICAL: 11139; DM9601-7S	EA		1	*	*	2	*	*	2	8	14	2-8	11J1
P	F		5935-883-8140							B	C830 CONNECTOR, RECEPTACLE, ELECTRICAL: SAME AS B098	EA		1									2-8	11J2
P	F		5999-133-5880							B	C831 CONTACT ASSEMBLY, ELECTRICAL: 14304; 356-0039	EA		1	*	*	2	*	*	2	8	4		
M	D									B	C832 COVER SUBASSEMBLY: 14304; 425-0025	EA		1										
X2	F									*	C833 SCREW, MACHINE: 14304; H0411	EA		4										
X2	F		5310-948-0798							*	C834 WASHER, ROLLED: 04865; 6W	EA		4										

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(10) (B) ITEM OR SYMBOL NUMBER
M	D									C	C835 COVER, CONTROL, RADIO SET: 14304; 425-0024	EA		1										
X2	F									C	C836 GASKET: 14304; 162-0350	Ea		8										
X2	F									C	C837 GASKET: SAME AS C836	EA		REF										
X2	F									C	C838 GASKET: SAME AS C836	EA		REF										
X2	F									C	C839 GASKET: SAME AS C836	EA		REF										
X2	F									C	C840 GASKET: SAME AS C836	EA		REF										
X2	F									C	C841 GASKET: SAME AS C836	Ea		REF										
X2	F									C	C842 GASKET: SAME AS C836	EA		REF										
X2	F									C	C843 GASKET: SAME AS C836	EA		REF										
X2	F									C	C844 GASKET: 14304; 162-0352	EA		4										
X2	F									C	C845 GASKET: SAME AS C844	EA		REF										
X2	F									C	C846 GASKET: SAME AS C844	EA		REF										
X2	F									C	C847 GASKET: SAME AS C844	EA		REF										
P	O	S	5965-102-8521							B	C848 HANDSET: H-280/GRC-165	EA		1	*	*	*	*	*	*	4	5	12 1-2	11HS1
P	F		5935-801-8314							C	C849 CONNECTOR, PLUG, ELECTRICAL: 11139; DM9728-7P	EA		1	*	*	2	*	*	2	8	14	12 1-2	11P1
X2	F									C	C850 HANDSET: 14304; A0016	EA		1									12 1-2	11HS1
P	O									B	C851 KNOB: 42498 7F2L	Ea		2	*	2	2	*	*	2	13	14		
P	O									B	C852 KNOB: SAME AS C851	EA		REF										
P	F		5965-241-3745							B	C853 LOUDSPEAKER, PERM MAGNET: SAME AS B380	EA		1									2-8	11LS1
X2	F									*	C854 NUT, PLAIN, PLATE: SAME AS B381	EA		4										
X2	F		5305-687-7268							*	C855 SCREW, MACHINE: SAME AS B382	EA		4										
X2	F									B	C856 LOUVER, METAL: SAME AS B383	EA		1										

(1) (A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3)	DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1 - 20	DS (B) 21-50	DS (C) 51-100	GS (A) 1 - 20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	F		5905-190-8883							B	C857	RESISTOR, FIXED, COMPOSITION: 81349; RC20GF100J	EA		3	*	2	2	*	2	2	18	21	2-8	11R1
P	F		5905-190-8883							H	C858	RESISTOR, FIXED, COMPOSITION: SAME AS C857	EA		REF									2-8	11R2
P	F		5905-190-8883							B	C859	RESISTOR, FIXED, COMPOSITION: SAME AS C857	EA		REF									2-8	11R3
P	F		5905-195-6806							B	C860	RESISTOR, FIXED, COMPOSITION: SAME AS C806	EA		1									2-8	11R4
P	F		5905-251-7638							B	C861	RESISTOR, VARIABLE: 14304; R3173	EA		1	*	*	2	*	*	2	8	8	2-8	11R5
X2	F									*	C862	NUT, PLAIN, HEXAGON: 14304; H0962	EA		1										
P	F		5930-909-7356							B	C863	SWITCH, SECTION ROTARY: 14304; S0000	EA		1	*	*	2	*	*	2	8	15	2-8	11S1
X2	F									*	C864	NUT, PLAIN, HEXAGON: SAME AS C862	EA		1										
X2	F									B	C865	TERMINAL, FEEDTHRU, INSULATED: 17117; 2308-91-5	EA		1										
X2	F		5305-889-3116							*	C866	SCREW, MACHINE: SAME AS A041	EA		1										
X2	F		5310-515-7999							*	C867	WASHER, LOCK: SAME AS A042	EA		1										
X2	F									B	C868	TERMINAL, LUG: SAME AS A581	EA		1										
X2	F		5310-063-8761							*	C869	NUT, PLAIN, HEXAGON: SAME AS A296	EA		1										
X2	F		5305-993-0190							*	C870	SCREW, MACHINE: SAME AS A139	EA		1										
X2	F		5310-515-7999							*	C871	WASHER, LOCK: SAME AS A042	EA		1										
P	F	S	5950-498-3501							B	C872	TRANSFORMER ASSEMBLY: 14304; 356-0013	EA		1	*	*	2	*	*	*	8	7	5-3	11A2
X2	F		5305-984-4984							*	C873	SCREW, MACHINE: SAME AS A065	EA		4										
X2	F		5310-515-7997							*	C874	WASHER, LOCK: SAME AS A054	EA		4										
P	F		5910-865-3610							C	C875	CAPACITOR, FIXED, ELECTROLYTIC: 93790; NIW35-50	EA		2	*	2	2	*	*	2	13	16	5-3	11A2C1
P	F		5910-865-3610							C	C876	CAPACITOR, FIXED, ELECTROLYTIC: SAME AS C875	EA		REF									5-3	11A2C2

(1) (A) SOURCE CD	(1) (B) MAINT. CD	(1) (C) REC. CODE	REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE (2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	(4) UNIT OF ISSUE	(5) QTY INC IN UN PK	(6) QTY INC IN UNIT	(7) 30 DAY MAINT. ALW. DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	(8) 1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	(9) DEPOT MAINT. ALW. PER 100 EQUIP.	(10) ILLUSTRATIONS (A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
X2	F									C	C877 PRINTED WIRING BOARD: 14304; 356-0014	EA		1										
P	F		5905-279-3506							C	C878 RESISTOR, FIXED, COMPOSITION: 81349; RC07GF332J	EA		1	*	*	2	*	*	2	8	7	5-3	11A2R1
P	F		5905-192-3973							C	C879 RESISTOR, FIXED, COMPOSITION: SAME AS C189	EA		1									5-3	11A2R2
X2	F									C	C880 SPACER, STEPPED: 06540; 4828	EA		4										
X2	F									C	C881 SPACER, STEPPED: SAME AS C880	EA		REF										
X2	F									C	C882 SPACER, STEPPED: SAME AS C880	EA		REF										
X2	F									C	C883 SPACER, STEPPED: SAME AS C880	EA		REF										
X2	F		5940-660-3759							C	C884 TERMINAL, STUD: SAME AS A430	EA		9										
X2	F		5940-660-3759							C	C885 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	F		5940-660-3759							C	C886 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	F		5940-660-3759							C	C887 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	F		5940-660-3759							C	C888 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	F		5940-660-3759							C	C889 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	F		5940-660-3759							C	C890 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	F		5940-660-3759							C	C891 TERMINAL, STUD: SAME AS A430	EA		REF										
X2	F		5940-660-3759							C	C892 TERMINAL, STUD: SAME AS A430	EA		REF										
P	F		5950-910-2790							C	C893 TRANSFORMER, AUDIO FREQUENCY: 14304; 162-0811	EA		2	*	2	2	*	*	2	13	14	5-3	11A2T1
P	F		5950-910-2790							C	C894 TRANSFORMER, AUDIO FREQUENCY: SAME AS C893	EA		REF									5-3	11A2T2
A	O	S								A	C895 ANTENNA: AS-2203/GRC-165	EA		REF									2-5	12
P	C		5985-733-6045							B	C896 ANTENNA ELEMENT: AT-1042/V	EA		1	*	*	*	*	*	*	4	3	2-5	12E1
P	C		5985-733-6044							B	C897 ANTENNA ELEMENT: AT-1041/V	EA		1	*	*	*	*	*	*	4	3	2-5	12E2
P	C		5985-733-6043							B	C898 ANTENNA ELEMENT: AT-1040/V	EA		1	*	*	*	*	*	*	4	3	2-5	12E3

(1)			REPAIR PARTS FOR DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTENANCE									(4)	(5)	(6)	(7) 30 DAY MAINT. ALW.						(8)	(9)	(10) ILLUSTRATIONS	
(A) SOURCE CD	(B) MAINT. CD	(C) REC. CODE	(2) FEDERAL STOCK NUMBER	MODEL 1	2	3	4	5	6	IND CD	(3) DESCRIPTION	UNIT OF ISSUE	QTY INC IN UN PK	QTY INC IN UNIT	DS (A) 1-20	DS (B) 21-50	DS (C) 51-100	GS (A) 1-20	GS (B) 21-50	GS (C) 51-100	1 YR. ALW. PER 100 EQUIP. CNTGCY. PL.	DEPOT MAINT. ALW. PER 100 EQUIP.	(A) FIGURE NUMBER	(B) ITEM OR SYMBOL NUMBER
P	C		5985-733-6042							B	C899 ANTENNA ELEMENT: AT-1039/V	EA		1	*	*	*	*	*	*	4	3	2-5	12E4
X2	O		5820-931-9106							B	C900 BASE, ANTENNA SUPPORT: AB-1082/GRC-165	EA		1									2-5	12E5

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE

TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
3010-670-1701	6-10	12
3010-670-1701	6-10	14
3010-670-1701	4-4	25
3010-670-1701	4-4	26
3020-244-9921	4-4	5
3020-244-9921	4-4	8
3020-244-9922	4-4	17
3020-244-9922	4-4	21
3020-253-0759	4-4	15
3020-253-0759	4-4	19
3030-241-5053	6-11	42
3030-241-5053	6-11	48
4140-965-7580		1A23B1
5305-272-4123	3-40	16
5305-531-0137	6-10	13
5305-531-0137	6-11	49
5305-531-0137	6-11	53
5305-531-0137	6-11	55
5305-531-0137	6-11	74
5305-889-2997	6-11	31
5305-889-3116	6-11	1A1A5MP6H1
5305-889-3116	6-11	1A1A5MP7H1
5305-889-3116	6-11	1A1A5MP8H1
5305-889-3116	6-11	1A1A5MP9H1
5305-889-3116	3-22	1A6H2
5305-889-3116	3-42	1A14H2
5305-889-3116	3-44	1A15H2
5305-889-3116	6-11	2
5305-889-3116	6-10	4
5305-889-3116	6-11	12
5305-889-3116	6-11	31
5305-889-3116	6-11	78
5305-889-3116	6-11	83
5305-889-3116	6-11	86
5305-889-3118	3-20	1A5H2
5305-889-3118	6-11	37
5305-889-3118	6-11	41
5305-889-3118	6-11	43
5305-889-3118	6-11	47
5305-928-2690	6-11	62
5305-983-6730	3-37	1
5305-983-6730	3-34	2
5305-983-6730	3-40	4
5305-983-6730	3-31	5
5305-983-6730	3-31	6
5305-984-4984	6-11	66
5305-984-4988	6-11	33
5305-984-4988	6-11	112
5305-993-0190	3-34	1
5305-993-0190	3-37	1
5305-993-0190	3-40	5
5305-993-0190	3-31	7
5305-993-0190	3-34	11
5305-993-0190	3-37	11
5305-993-0190	3-40	12
5305-993-0190	3-55	15
5305-993-0190	3-31	17
5305-993-0190	3-55	18
5305-993-0190	6-11	19
5305-993-0190	3-55	22
5305-993-0190	6-11	31
5310-058-9731	3-55	11
5310-063-8761	6-11	10
5310-063-8761	6-11	25
5310-063-8761	6-11	103
5310-515-7997	6-11	34
5310-515-7997	6-11	67
5310-515-7997	6-11	113
5310-515-7999	3-22	1A6H2
5310-515-7999	3-42	1A14H2
5310-515-7999	3-44	1A15H1
5310-515-7999	3-40	2
5310-515-7999	3-34	3
5310-515-7999	3-37	3
5310-515-7999	6-11	3
5310-515-7999	6-10	5
5310-515-7999	3-31	8
5310-515-7999	3-31	10
5310-515-7999	6-11	11
5310-515-7999	3-34	12
5310-515-7999	3-37	12
5310-515-7999	3-40	13
5310-515-7999	3-31	18
5310-515-7999	6-11	20
5310-515-7999	6-11	26
5310-515-7999	6-11	32
5310-515-7999	6-11	79
5310-515-7999	6-11	84
5310-515-7999	6-11	87
5310-515-7999	6-11	104
5310-515-7999	6-11	116
5310-782-1349	3-22	1A6H2
5310-782-1349	3-42	1A14H2
5310-782-1349	3-44	1A15H2
5310-782-1349	6-11	32
5310-928-2690	3-20	1A5H2
5310-928-2690	6-11	40
5310-928-2690	6-11	46
5310-928-2690	6-11	63
5310-933-8118	3-22	1A6H2
5310-933-8118	3-22	1A6H3
5310-933-8118	3-42	1A14H2
5310-969-6959	4-4	2
5310-969-6959	6-11	25
5315-058-9731	3-55	11
5335-680-1357		1MP94
5335-680-1357		1MP95
5340-255-0286	4-4	38
5340-255-0286	4-4	39
5340-560-9262		1A23C38
5340-619-0188	6-11	65
5355-942-7240		1MP97
5355-942-7240	4-4	41
5820-135-0376	3-22	1A6

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5820-135-0377	3-10	1A2
5820-135-0378	2-3	1S2
5820-135-0379	2-2	1A17
5820-135-0382	3-33	1A11
5820-135-0386	3-6	1A1A4
5820-135-0387	3-6	1A1A3
5820-135-0388	3-6	1A1A2
5820-135-0389	3-6	1A1A1
5820-135-0391	3-24	1A7
5820-135-0392	3-46	1A16
5820-135-0392	3-46	11A1
5820-135-0393	4-3	2A1
5820-135-4572	3-6	1A1A6
5820-179-3761	3-30	1A10
5820-179-3762	3-36	1A12
5820-179-3763	3-39	1A13
5820-191-9295	3-44	1A15
5820-191-9296	3-42	1A14
5820-191-9297	3-20	1A5
5820-931-9106	2-5	12E5
5820-986-7716	6-11	60
5905-088-8851	3-10	1A2R66
5905-141-1183	3-16	1A3R4
5905-141-1183	3-16	1A3R28
5905-141-1183	3-16	1A3R43
5905-141-1183	3-28	1A9R6
5905-141-1183	3-28	1A9R11
5905-171-1998	3-6	1A1A6R8
5905-171-1998	3-42	1A14R1
5905-171-1999	3-36	1A12R8
5905-171-2006	3-33	1A11R10
5905-171-2006	3-39	1A13R6
5905-171-2006	3-39	1A13R8
5905-185-8510		1R11
5905-185-8510	3-6	1A1A6R4
5905-185-8510	3-10	1A2R3
5905-185-8510	3-10	1A2R6
5905-185-8510	3-10	1A2R7
5905-185-8510	3-10	1A2R12
5905-185-8510	3-10	1A2R15
5905-185-8510	3-10	1A2R17
5905-185-8510	3-10	1A2R20
5905-185-8510	3-10	1A2R21
5905-185-8510	3-10	1A2R25
5905-185-8510	3-10	1A2R28
5905-185-8510	3-10	1A2R30
5905-185-8510	3-10	1A2R32
5905-185-8510	3-10	1A2R34
5905-185-8510	3-10	1A2R40
5905-185-8510	3-10	1A2R43
5905-185-8510	3-10	1A2R51
5905-185-8510	3-42	1A14R2
5905-185-8510	3-46	1A16R2
5905-185-8510	3-46	11A1R2
5905-185-8516	3-20	1A5R1
5905-190-8880	3-10	1A2R16
5905-190-8880	3-10	1A2R57
5905-190-8881	3-6	1A1A6R17
5905-190-8881	3-10	1A2R5
5905-190-8881	3-10	1A2R10
5905-190-8881	3-10	1A2R19
5905-190-8881	3-10	1A2R23
5905-190-8881	3-10	1A2R29
5905-190-8881	3-10	1A2R33
5905-190-8881	3-10	1A2R35
5905-190-8881	3-10	1A2R50
5905-190-8881	3-20	1A5R2
5905-190-8883	3-20	1A5R3
5905-190-8883	3-30	1A10R8
5905-190-8883	3-33	1A11R4

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5905-190-8883	3-36	1A12R9
5905-190-8883	2-8	11R1
5905-190-8883	2-8	11R2
5905-190-8883	2-8	11R3
5905-190-8889		1R12
5905-190-8889		1R13
5905-190-8889		1R14
5905-190-8889	3-6	1A1A6R10
5905-190-8889	3-6	1A1A6R15
5905-190-8889	3-10	1A2R63
5905-190-8889	3-10	1A2R64
5905-190-8889	3-30	1A10R10
5905-190-8889	3-39	1A13R7
5905-190-8889	3-42	1A14R7
5905-190-8889	3-46	1A16R5
5905-190-8889		1A20R7
5905-190-8889		1A20R8
5905-190-8889	3-46	11A1R5
5905-192-0667	3-6	1A1A6R3
5905-192-3971	3-10	1A2R8
5905-192-3971	3-42	1A14R8
5905-192-3973		1R27
5905-192-3973	3-30	1A10R5
5905-192-3973	3-33	1A11R7
5905-192-3973	3-33	1A11R8
5905-192-3973	3-46	1A16R7
5905-192-3973	3-46	11A1R7
5905-192-3973	5-3	11A2R2
5905-192-4490	3-46	1A16R6
5905-192-4490	3-46	11A1R6
5905-195-5546	3-10	1A2R61
5905-195-5546	3-36	1A12R3
5905-195-6453	3-6	1A1A3R29
5905-195-6453	3-10	1A2R47
5905-195-6453	3-10	1A2R68
5905-195-6453	3-10	1A2R69
5905-195-6453	3-36	1A12R6
5905-195-6453	3-42	1A14R5
5905-195-6761	3-6	1A1A6R14
5905-195-6791	3-10	1A2R54
5905-195-6791	3-30	1A10R4
5905-195-6791	3-36	1A12R2
5905-195-6791		1R3
5905-195-6800	3-10	1A2R26
5905-195-6800	3-10	1A2R42
5905-195-6800	3-30	1A10R11
5905-195-6800	3-39	1A13R3
5905-195-6806	3-6	1A1A6R13
5905-195-6806	3-10	1A2R41
5905-195-6806	3-10	1A2R72
5905-195-6806	3-39	1A13R1
5905-195-6806	3-46	1A16R3
5905-195-6806	2-8	11R4
5905-195-6806	3-46	11A1R8
5905-195-9481		1R29
5905-249-3661	3-6	1A1A6R9
5905-251-7638	2-8	11R5
5905-251-7639	2-2	1R19
5905-252-5434	3-30	1A10R9
5905-254-7096		1A20R5
5905-254-7101		1R25
5905-254-9201		1R50
5905-257-0937		1R2
5905-279-1686	3-18	1A4R40
5905-279-1733	4-3	2A1R1
5905-279-1733	4-3	2A1R2
5905-279-1734	3-10	1A2R1
5905-279-1734	3-26	1A3R47
5905-279-1738		1R55
5905-279-1757	3-10	1A2R70

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE

TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5905-279-1757	3-46	1A16R4
5905-279-1876		1R57
5905-279-1876	3-6	1A1A6R5
5905-279-1876	3-10	1A2R71
5905-279-1876	3-30	1A10R3
5905-279-1876	3-33	1A11R2
5905-279-1876	3-36	1A12R5
5905-279-1876	3-39	1A13R5
5905-279-1876	3-42	1A14R6
5905-279-1877		1R31
5905-279-1880	3-10	1A2R39
5905-279-1880	3-36	1A12R1
5905-279-1880	3-42	1A14R4
5905-279-1880	3-33	1A11R5
5905-279-1890	3-36	1A12R7
5905-279-1894	3-10	1A2R45
5905-279-1897	3-10	1A2R44
5905-279-1903		1R1
5905-279-2522	3-42	1A14R3
5905-279-2616	3-10	1A2R55
5905-279-2616	3-10	1A2R56
5905-279-2616	3-30	1A10R1
5905-279-2616	3-30	1A10R2
5905-279-2616	3-33	1A11R1
5905-279-2616	3-33	1A11R9
5905-279-2616		1A20R56
5905-279-2628		1R9
5905-279-2633	3-51	10R3
5905-279-2643	3-26	1A8R53
5905-279-3418		1R40
5905-279-3418		1R41
5905-279-3418		1R42
5905-279-3499	3-36	1A12R4
5905-279-3500	3-20	1A5R4
5905-279-3502	3-30	1A10R6
5905-279-3502	3-30	1A10R7
5905-279-3502	3-33	1A11R3
5905-279-3502	3-33	1A11R6
5905-279-3503	3-10	1A2R4
5905-279-3503	3-10	1A2R9
5905-279-3503	3-10	1A2R18
5905-279-3503	3-10	1A2R22
5905-279-3503	3-10	1A2R31
5905-279-3503	3-10	1A2R37
5905-279-3504	3-6	1A1A6R7
5905-279-3504	3-10	1A2R2
5905-279-3504	3-10	1A2R46
5905-279-3505		1A20R6
5905-279-3506	3-10	1A2R48
5905-279-3506	3-10	1A2R53
5905-279-3506	3-10	1A2R58
5905-279-3506	3-39	1A13R2
5905-279-3506	3-46	1A16R3
5905-279-3506	3-46	11A1R3
5905-279-3506	5-3	11A2R1
5905-279-3507		1R32
5905-279-3513	3-6	1A1A6R6
5905-279-3513	3-10	1A2R14
5905-279-3513	3-10	1A2R27
5905-279-3513	3-10	1A2R36
5905-279-3513	3-33	1A11R11
5905-279-3514	3-10	1A2R13
5905-279-3519	3-10	1A2R59
5905-279-3519	3-10	1A2R60
5905-299-1971		1R30
5905-299-1971	3-6	1A1A1R19
5905-299-1971	3-6	1A1A1R20
5905-299-1971	3-6	1A1A2R21
5905-299-1971	3-6	1A1A2R22
5905-299-1971	3-6	1A1A3R23
5905-299-1971	3-6	1A1A3R24
5905-299-1971	3-6	1A1A4R25
5905-299-1971	3-6	1A1A4R26
5905-299-1971	3-10	1A2R49
5905-299-1971	3-39	1A13R4
5905-299-1971	3-46	1A16R1
5905-299-1971	3-46	11A1R1
5905-299-2028		1R28
5905-539-2479		1A20R4
5905-542-7819	3-10	1A2R67
5905-681-6462	3-6	1A1A5R1
5905-681-6462	3-16	1A3R11
5905-681-6462	3-16	1A3R41
5905-681-6462	3-24	1A7R43
5905-681-6462	3-24	1A7R45
5905-681-6462	3-26	1A8R1
5905-681-6462	3-28	1A9R1
5905-681-6462	3-28	1A9R2
5905-681-6462	3-28	1A9A10
5905-681-6462	3-28	1A9R15
5905-681-8818	3-16	1A3R2
5905-681-8818	3-16	1A3R7
5905-681-8818	3-16	1A3R13
5905-681-8818	3-16	1A3R17
5905-681-8818	3-16	1A3R23
5905-681-8818	3-16	1A3R26
5905-681-8818	3-16	1A3R31
5905-681-8818	3-16	1A3R36
5905-681-8818	3-16	1A3R38
5905-681-8818	3-16	1A3R42
5905-681-8818	3-18	1A4R33
5905-681-8818	3-18	1A4R37
5905-681-8818	3-22	1A6R18
5905-681-8818	3-24	1A7R7
5905-681-8818	3-24	1A7R41
5905-681-8818	3-26	1A8R25
5905-681-8818	3-26	1A8R28
5905-681-8818	3-26	1A8R29
5905-681-8818	3-26	1A8R31
5905-681-8818	3-28	1A9R9
5905-681-8818	3-28	1A9R14
5905-681-8818	3-44	1A15R5
5905-681-9969	3-16	1A3R6
5905-681-9969	3-16	1A3R12
5905-681-9969	3-16	1A3R16
5905-681-9969	3-16	1A3R22
5905-681-9969	3-16	1A3R30
5905-681-9969	3-16	1A3R35
5905-681-9969	3-16	1A3R37
5905-681-9969	3-18	1A4R1
5905-681-9969	3-18	1A4R6
5905-681-9969	3-18	1A4R10
5905-681-9969	3-18	1A4R16
5905-681-9969	3-18	1A4R20
5905-681-9969	3-18	1A4R27
5905-681-9969	3-18	1A4R32
5905-681-9969	3-18	1A4R36
5905-681-9969	3-24	1A7R17
5905-681-9969	3-24	1A7R25
5905-681-9969	3-24	1A7R36
5905-681-9969	3-24	1A7R37
5905-681-9969	3-24	1A7R40
5905-681-9969	3-26	1A8R17
5905-681-9969	3-26	1A8R22
5905-681-9969	3-26	1A8R37
5905-681-9969	3-26	1A8R42
5905-681-9969	3-26	1A8R48
5905-681-9969	3-26	1A8R70

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5905-681-9969	3-28	1A9R3
5905-681-9969	3-28	1A9R8
5905-681-9969	3-28	1A9R13
5905-681-9969	3-44	1A15R1
5905-681-9970	3-18	1A4R24
5905-681-9970	3-24	1A7R2
5905-681-9970	3-24	1A7R22
5905-681-9970	3-26	1A8R38
5905-681-9970	3-44	1A15R2
5905-682-4095	3-18	1A4R39
5905-682-4098	3-26	1A8R51
5905-682-4098	3-28	1A9R18
5905-682-4109	3-26	1A8R26
5905-682-4109	3-26	1A8R41
5905-682-4109	3-26	1A8R43
5905-683-2235	3-24	1A7R38
5905-683-2235	3-28	1A9R17
5905-683-2236	3-22	1A6R5
5905-683-2236	3-22	1A6R7
5905-683-2236	3-22	1A6R20
5905-683-2236	3-24	1A7R20
5905-683-2236	3-24	1A7R51
5905-683-2238	3-16	1A3R1
5905-683-2238	3-16	1A3R10
5905-683-2238	3-16	1A3R20
5905-683-2238	3-16	1A3R25
5905-683-2238	3-16	1A3R40
5905-683-2238	3-18	1A4R2
5905-683-2238	3-18	1A4R4
5905-683-2238	3-18	1A4R7
5905-683-2238	3-18	1A4R11
5905-683-2238	3-18	1A4R14
5905-683-2238	3-18	1A4R17
5905-683-2238	3-18	1A4R22
5905-683-2238	3-22	1A6R19
5905-683-2238	3-24	1A7R1
5905-683-2238	3-24	1A7R6
5905-683-2238	3-24	1A7R10
5905-683-2238	3-24	1A7R11
5905-683-2238	3-24	1A7R33
5905-683-2238	3-24	1A7R44
5905-683-2238	3-24	1A7R47
5905-683-2240	3-16	1A3R34
5905-683-2240	3-24	1A7R9
5905-683-2240	3-24	1A7R49
5905-683-2240	3-28	1A9R12
5905-683-2242	3-18	1A4R29
5905-683-2242	3-24	1A7R5
5905-683-2242	3-24	1A7R15
5905-683-2243	3-24	1A7R46
5905-683-2243	3-24	1A7R48
5905-683-2243	3-44	1A15R4
5905-683-2246	3-24	1A7R50
5905-683-7723		1R24
5905-683-7723	3-16	1A3R39
5905-683-7723	3-18	1A4R3
5905-683-7723	3-18	1A4R8
5905-683-7723	3-18	1A4R12
5905-683-7723	3-18	1A4R18
5905-683-7723	3-18	1A4R23
5905-683-7723	3-18	1A4R38
5905-683-7723	3-22	1A6R11
5905-683-7723	3-24	1A7R23
5905-683-7723	3-26	1A8R18
5905-683-7723	3-26	1A8R19
5905-683-7723	3-26	1A8R24
5905-683-7723	3-44	1A15R8
5905-683-7724	3-18	1A4R34
5905-686-3798		1R26
5905-686-3798	3-22	1A6R1
5905-686-3798	3-22	1A6R8
5905-686-3798	3-22	1A6R13
5905-686-3798	3-24	1A7R18
5905-686-3798	3-24	1A7R26
5905-686-3798	3-26	1A8R33
5905-686-3798	3-26	1A8R50
5905-686-3798	3-26	1A8R71
5905-686-3798	3-28	1A9R4
5905-686-9994	3-16	1A3R3
5905-686-9994	3-16	1A3R8
5905-686-9994	3-16	1A3R18
5905-686-9994	3-16	1A3R21
5905-686-9994	3-16	1A3R24
5905-686-9994	3-16	1A3R27
5905-686-9994	3-16	1A3R32
5905-686-9994	3-22	1A6R16
5905-686-9994	3-22	1A6R17
5905-686-9994	3-24	1A7R19
5905-686-9994	3-24	1A7R27
5905-686-9994	3-26	1A8R69
5905-686-9994	3-44	1A15R7
5905-686-9996	3-18	1A4R15
5905-686-9996	3-24	1A7R4
5905-686-9996	3-24	1A7R8
5905-686-9996	3-24	1A7R12
5905-686-9996	3-24	1A7R13
5905-686-9996	3-24	1A7R31
5905-686-9996	3-24	1A7R32
5905-686-9996	3-26	1A8R23
5905-686-9998	3-24	1A7R28
5905-686-9998	3-24	1A7R34
5905-687-0000		1R22
5905-687-0002		1R33
5905-687-0002	3-16	1A3R33
5905-687-0002	3-18	1A4R30
5905-687-0002	3-26	1A8R45
5905-688-3738	3-22	1A6R12
5905-688-3738	3-26	1A8R35
5905-688-3738	3-26	1A8R44
5905-691-0195	3-18	1A4R9
5905-691-0195	3-26	1A8R36
5905-721-1488	3-16	1A3R9
5905-721-1488	3-26	1A8R52
5905-723-5251		1R18
5905-723-5251		1R23
5905-723-5251	3-16	1A3R14
5905-723-5251	3-16	1A3R15
5905-723-5251	3-22	1A6R2
5905-723-5251	3-22	1A6R4
5905-723-5251	3-22	1A6R6
5905-723-5251	3-22	1A6R9
5905-723-5251	3-22	1A6R14
5905-723-5251	3-26	1A8R21
5905-723-5251	3-26	1A8R39
5905-723-5251	3-26	1A8R67
5905-723-5251	3-28	1A9R5
5905-723-5251	3-44	1A15R9
5905-725-6995	3-24	1A7R30
5905-725-6995	3-26	1A8R68
5905-725-6995	3-44	1A15R3
5905-727-8001	3-18	1A4R5
5905-727-8001	3-18	1A4R21
5905-727-8001	3-18	1A4R31
5905-759-3531	3-26	1A8R30
5905-800-0179	3-26	1A8R32
5905-802-6730	3-6	1A1A5R2
5905-802-6730	3-16	1A3R19
5905-802-6730	3-22	1A6R3

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5905-802-6730	3-22	1A6R10
5905-802-6730	3-22	1A6R15
5905-803-3468	3-24	1A7R21
5905-806-0636	3-16	1A3R5
5905-806-0636	3-16	1A3R29
5905-806-0636	3-26	1A8R27
5905-806-0636	3-26	1A8R40
5905-806-0636	3-26	1A8R46
5905-807-6269	3-24	1A7R14
5905-817-7971	3-24	1A7R24
5905-820-9124	3-28	1A9R16
5905-835-1613	3-24	1A7R16
5905-841-7461	3-46	11A1R4
5905-845-9431	3-10	1A2R62
5905-855-3173	3-18	1A4R19
5905-855-3173	3-18	1A4R25
5905-855-3173	3-18	1A4R26
5905-855-3173	3-18	1A4R28
5905-855-3173	3-24	1A7R3
5905-855-3173	3-24	1A7R29
5905-855-3173	3-26	1A8R20
5905-855-3173	3-26	1A8R34
5905-887-2108	3-26	1A8R63
5905-887-2108	3-26	1A8R64
5905-887-6057	3-26	1A8R56
5905-897-2119	3-26	1A8R65
5905-897-2119	3-26	1A8R30
5905-903-0767	3-50	9R1
5905-903-0767	3-51	10R1
5905-903-0772	3-6	1A1A6R31
5905-903-0772	3-24	1A7R39
5905-903-0772	3-28	1A9R7
5905-903-0772	3-44	1A15R6
5905-903-0773	3-10	1A2R11
5905-903-0773	3-10	1A2R24
5905-903-0773	3-10	1A2R38
5905-903-0773	3-24	1A7R35
5905-903-0775	2-2	1R10
5905-965-5554	3-26	1A8R57
5905-965-5554	3-26	1A8R58
5905-984-4868	3-46	11A1R9
5905-984-4868	3-46	11A1R10
5905-988-2310	3-26	1A8R54
5905-988-2310	3-26	1A8R55
5905-988-2310	3-26	1A8R59
5905-988-2310	3-26	1A8R60
5905-988-2310	3-26	1A8R61
5905-988-2310	3-26	1A8R62
5905-993-6985	3-46	1A16R9
5905-993-6985	3-46	1A16R10
5910-018-1944	3-46	1A16C3
5910-018-1944	3-46	11A1C3
5910-045-4117	3-39	1A13C1
5910-051-6919	3-16	1A3C5
5910-051-6919	3-16	1A3C8
5910-051-6919	3-16	1A3C16
5910-051-6919	3-16	1A3C22
5910-051-6919	3-16	1A3C31
5910-051-6919	3-16	1A3C33
5910-051-6919	3-16	1A3C36
5910-051-6919	3-18	1A4C3
5910-051-6919	3-18	1A4C11
5910-051-6919	3-18	1A4C25
5910-051-6919	3-18	1A4C26
5910-051-6919	3-22	1A6C2
5910-051-6919	3-22	1A6C19
5910-051-6919	3-22	1A6C27
5910-051-6919	3-33	1A11C3
5910-061-7442	3-28	1A9C11
5910-064-3067	3-18	1A4C17
5910-064-3067	3-18	1A4C18
5910-064-3894	3-26	1A8C57
5910-069-2045	3-6	1A1A1C7
5910-069-2045	3-6	1A1A2C19
5910-069-2045	3-6	1A1A3C26
5910-069-2045	3-6	1A1A4C34
5910-069-5344	3-18	1A4C10
5910-085-0211	4-4	43
5910-088-1245	3-18	1A4C22
5910-088-1245	3-33	1A11C1
5910-088-1246	3-10	1A2C29
5910-088-1624	3-10	1A2C43
5910-088-1625	3-16	1A3C4
5910-088-1625	4-3	2A1C3
5910-088-1625	4-3	2A1C4
5910-088-1629	3-10	1A2C37
5910-088-1629	3-18	1A4C29
5910-107-0757		1C81
5910-107-0757	3-20	1A5C3
5910-195-9771		2C13
5910-195-9771		2C14
5910-195-9771		2C15
5910-195-9771	4-4	46
5910-195-9771	4-4	47
5910-225-7331	3-26	1A8C53
5910-225-7331	3-46	1A16C2, 11A1C2
5910-270-9083		1C16
5910-270-9083		1C17
5910-270-9083		1C18
5910-270-9083		1C83
5910-270-9083	3-6	1A1A6C45
5910-270-9083	3-6	1A1A6C48
5910-270-9083	3-6	1A1A6C54
5910-270-9083	3-6	1A1A6C56
5910-270-9083	3-26	1A8C44
5910-270-9083	3-26	1A8C56
5910-270-9083	3-51	10C4
5910-270-9083	3-51	10C5
5910-401-6254		1C14
5910-401-6254		1C49
5910-401-6254		1C50
5910-401-6254		1C51
5910-401-6254		1C57
5910-401-6254	3-10	1A2C3
5910-401-6254	3-10	1A2C11
5910-401-6254	3-10	1A2C19
5910-401-6254	3-10	1A2C39
5910-401-6254	3-10	1A2C42
5910-401-6254	3-10	1A2C45
5910-401-6254	3-10	1A2C46
5910-401-6254	3-16	1A3C1
5910-401-6254	3-16	1A3C2
5910-401-6254	3-16	1A3C6
5910-401-6254	3-16	1A3C10
5910-401-6254	3-16	1A3C11
5910-401-6254	3-16	1A3C12
5910-401-6254	3-16	1A3C13
5910-401-6254	3-16	1A3C14
5910-401-6254	3-16	1A3C15
5910-401-6254	3-16	1A3C18
5910-401-6254	3-16	1A3C19
5910-401-6254	3-16	1A3C21
5910-401-6254	3-16	1A3C24
5910-401-6254	3-16	1A3C26
5910-401-6254	3-16	1A3C27
5910-401-6254	3-16	1A3C28
5910-401-6254	3-16	1A3C29
5910-401-6254	3-16	1A3C30
5910-401-6254	3-16	1A3C37
5910-401-6254	3-16	1A3C38

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5910-401-6254	3-16	1A3C39
5910-401-6254	3-16	1A3C40
5910-401-6254	3-16	1A3C41
5910-401-6254	3-16	1A3C42
5910-401-6254	3-16	1A3C43
5910-401-6254	3-16	1A3C44
5910-401-6254	3-16	1A3C45
5910-401-6254	3-18	1A4C1
5910-401-6254	3-18	1A4C4
5910-401-6254	3-18	1A4C8
5910-401-6254	3-18	1A4C9
5910-401-6254	3-18	1A4C12
5910-401-6254	3-18	1A4C13
5910-401-6254	3-18	1A4C16
5910-401-6254	3-18	1A4C19
5910-401-6254	3-18	1A4C20
5910-401-6254	3-18	1A4C23
5910-401-6254	3-18	1A4C24
5910-401-6254	3-18	1A4C27
5910-401-6254	3-18	1A4C28
5910-401-6254	3-18	1A4C34
5910-401-6254	3-18	1A4C36
5910-401-6254	3-18	1A4C37
5910-401-6254	3-22	1A6C1
5910-401-6254	3-22	1A6C3
5910-401-6254	3-22	1A6C5
5910-401-6254	3-22	1A6C6
5910-401-6254	3-22	1A6C7
5910-401-6254	3-22	1A6C8
5910-401-6254	3-22	1A6C9
5910-401-6254	3-22	1A6C11
5910-401-6254	3-22	1A6C12
5910-401-6254	3-22	1A6C14
5910-401-6254	3-22	1A6C15
5910-401-6254	3-22	1A6C16
5910-401-6254	3-22	1A6C18
5910-401-6254	3-22	1A6C21
5910-401-6254	3-22	1A6C23
5910-401-6254	3-22	1A6C24
5910-401-6254	3-22	1A6C26
5910-401-6254	3-22	1A6C29
5910-401-6254	3-22	1A6C30
5910-401-6254	3-24	1A7C1
5910-401-6254	3-24	1A7C3
5910-401-6254	3-24	1A7C5
5910-401-6254	3-24	1A7C6
5910-401-6254	3-24	1A7C7
5910-401-6254	3-24	1A7C9
5910-401-6254	3-24	1A7C10
5910-401-6254	3-24	1A7C11
5910-401-6254	3-24	1A7C13
5910-401-6254	3-24	1A7C14
5910-401-6254	3-24	1A7C16
5910-401-6254	3-24	1A7C17
5910-401-6254	3-24	1A7C18
5910-401-6254	3-24	1A7C19
5910-401-6254	3-24	1A7C20
5910-401-6254	3-24	1A7C21
5910-401-6254	3-24	1A7C22
5910-401-6254	3-24	1A7C24
5910-401-6254	3-24	1A7C25
5910-401-6254	3-24	1A7C26
5910-401-6254	3-24	1A7C28
5910-401-6254	3-24	1A7C30
5910-401-6254	3-24	1A7C31
5910-401-6254	3-24	1A7C36
5910-401-6254	3-24	1A7C37
5910-401-6254	3-24	1A7C38
5910-401-6254	3-24	1A7C40
5910-401-6254	3-26	1A8C19
5910-401-6254	3-26	1A8C20
5910-401-6254	3-26	1A8C22
5910-401-6254	3-26	1A8C42
5910-401-6254	3-26	1A8C50
5910-401-6254	3-26	1A8C52
5910-401-6254	3-26	1A8C66
5910-401-6254	3-26	1A8C68
5910-401-6254	3-28	1A9C2
5910-401-6254	3-28	1A9C5
5910-401-6254	3-28	1A9C7
5910-401-6254	3-28	1A9C9
5910-401-6254	3-30	1A10C7
5910-401-6254	3-30	1A10C11
5910-401-6254	3-30	1A10C12
5910-401-6254	3-33	1A11C5
5910-401-6254	3-33	1A11C6
5910-401-6254	3-33	1A11C8
5910-401-6254	3-36	1A12C7
5910-401-6254	3-36	1A12C8
5910-401-6254	3-39	1A13C3
5910-401-6254	3-44	1A15C3
5910-401-6254	6-11	13
5910-401-6254	6-11	16
5910-486-6835	3-10	1A2C30
5910-498-5715	4-4	31
5910-498-5715	4-4	32
5910-498-5715	4-4	34
5910-498-5721		1C20
5910-498-5722	2-6	1C4
5910-498-5722	2-6	1C7
5910-498-5724		1C35
5910-543-9502		1C80
5910-552-0359	4-3	2A1C5
5910-552-0359	4-3	2A1C6
5910-577-1138	2-6	1C23
5910-578-5758	3-26	1A8C60
5910-666-8019	4-4	45
5910-667-6106	4-4	44
5910-683-3008		1C39
5910-683-3008		1C60
5910-683-3008		1C61
5910-683-3008		1C62
5910-683-3008		1C82
5910-683-3008	3-6	1A1A6C42
5910-683-3008	3-6	1A1A6C44
5910-683-3008	3-6	1A1A6C46
5910-683-3008	3-6	1A1A6C57
5910-683-3008	3-26	1A8C45
5910-683-3008	3-26	1A8C69
5910-694-6207	2-6	1C24
5910-723-5272	3-6	1A1A3C24
5910-725-7422	3-18	1A4C30
5910-725-8940	3-33	1A11C4
5910-725-8940	3-33	1A11C7
5910-730-3003	3-28	1A9C4
5910-779-3456	3-6	1A1A1C1
5910-779-3456	3-6	1A1A1C4
5910-779-3456	3-6	1A1A1C6
5910-779-3456	3-6	1A1A2C13
5910-779-3456	3-6	1A1A2C16
5910-779-3456	3-6	1A1A2C18
5910-779-3456	3-6	1A1A3C20
5910-779-3456	3-6	1A1A3C23
5910-779-3456	3-6	1A1A3C25
5910-779-3456	3-6	1A1A4C28
5910-779-3456	3-6	1A1A4C31
5910-779-3456	3-6	1A1A4C33
5910-782-1219	3-10	1A2C8

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE

TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5910-782-1219	3-10	1A2C16
5910-782-1219	3-10	1A2C24
5910-782-1219	3-16	1A3C46
5910-782-1219	3-16	1A3C47
5910-825-0403		1C22
5910-825-0403		1C26
5910-825-0403	3-10	1A2C27
5910-825-0403	3-10	1A2C28
5910-825-0403	3-10	1A2C32
5910-825-0403	3-10	1A2C35
5910-825-4340	3-6	1A1A2C17
5910-825-4340	3-16	1A3C9
5910-829-0249	3-51	10C1
5910-835-2718	3-39	1A13C5
5910-835-2718	3-46	1A16C5
5910-835-2718	3-46	11A1C5
5910-840-9530	3-18	1A4C31
5910-841-3131	3-6	1A1A4C32
5910-843-9594		1C15
5910-843-9594		1C19
5910-851-0690	3-16	1A3C25
5910-851-3328	3-10	1A2C33
5910-851-3328	3-10	1A2C41
5910-851-3328	3-10	1A2C47
5910-851-3328	3-18	1A4C21
5910-851-3328	3-18	1A4C33
5910-851-3328	3-22	1A6C28
5910-851-3328	3-24	1A7C4
5910-851-3328	3-24	1A7C8
5910-851-3328	3-24	1A7C12
5910-851-3328	3-24	1A7C15
5910-851-3328	3-24	1A7C23
5910-851-3328	3-24	1A7C27
5910-851-3328	3-26	1A8C41
5910-851-3328	3-26	1A8C61
5910-851-3328	3-26	1A8C62
5910-851-3328	3-26	1A8C63
5910-851-3328	3-26	1A8C64
5910-851-3328	3-26	1A8C67
5910-851-3328	3-33	1A11C9
5910-852-9695	3-26	1A8C59
5910-865-3610	5-3	11A2C1
5910-865-3610	5-3	11A2C2
5910-880-4793	3-39	1A13C7
5910-882-0091	3-36	1A12C2
5910-889-4419	3-18	1A4C7
5910-890-8996	3-33	1A11C10
5910-892-7736		1A23C38
5910-900-2694	3-18	1A4C5
5910-900-2694	3-18	1A4C14
5910-901-5909	4-3	2A1C1
5910-901-5909	4-3	2A1C2
5910-902-6958		1C5
5910-902-6958		1C6
5910-905-7001	3-28	1A9C1
5910-908-8316	2-6	1C25
5910-910-2824		1C32
5910-910-2824		1C33
5910-910-2829		1C3
5910-910-4099		1C27
5910-910-4161	2-2	1C2
5910-910-4162	2-2	1C1
5910-910-4163	3-30	1A10C5
5910-910-4174	3-10	1A2C9
5910-910-4175	3-10	1A2C17
5910-910-4176	3-10	1A2C25
5910-910-4177	3-10	1A2C34
5910-910-4178	3-10	1A2C38
5910-910-4640		1C28
5910-910-4640		1C29
5910-910-4645		1C30
5910-910-4647		1C34
5910-910-4647		1C36
5910-910-4647		1C37
5910-926-9784	3-26	1A8C39
5910-927-2836	3-46	1A16C4
5910-927-2836	3-46	11A1C4
5910-928-1332	3-26	1A8C58
5910-934-0327		1C12
5910-934-0327		1C13
5910-934-2752	3-16	1A3C3
5910-934-2865		1C40
5910-934-2865		1C74
5910-934-2865	3-10	1A2C6
5910-934-2865	3-10	1A2C14
5910-934-2865	3-10	1A2C22
5910-934-2865	3-16	1A3C17
5910-934-2865	3-18	1A4C35
5910-934-2865	3-20	1A5C2
5910-934-2865	3-22	1A6C4
5910-934-2865	3-22	1A6C17
5910-934-2865	3-22	1A6C25
5910-934-2865	3-24	1A7C2
5910-934-2865	3-24	1A7C29
5910-934-2865	3-24	1A7C33
5910-934-2865	3-24	1A7C35
5910-934-2865	3-24	1A7C39
5910-934-2865	3-26	1A8C23
5910-934-2865	3-26	1A8C25
5910-934-2865	3-26	1A8C26
5910-934-2865	3-26	1A8C30
5910-934-2865	3-26	1A8C32
5910-934-2865	3-26	1A8C33
5910-934-2865	3-26	1A8C34
5910-934-2865	3-26	1A8C35
5910-934-2865	3-26	1A8C37
5910-934-2865	3-28	1A9C6
5910-934-2865	3-42	1A14C5
5910-934-2865	3-42	1A14C6
5910-934-2865	3-46	1A16C1
5910-935-6859	3-18	1A4C2
5910-935-6859	3-26	1A8C27
5910-935-6859	3-26	1A8C28
5910-935-6859	3-26	1A8C29
5910-935-6859	3-28	1A9C8
5910-935-6859	3-28	1A9C10
5910-938-7441	3-30	1A10C8
5910-942-6409	3-36	1A12C1
5910-942-6409	3-36	1A12C5
5910-942-6409	3-36	1A12C6
5910-950-9196	3-53	1A19C41
5910-950-9196	3-53	1A19C44
5910-950-9196	3-53	1A19C45
5910-950-9196	3-53	1A19C48
5910-952-1708	3-6	1A1A1C3
5910-952-1708	3-6	1A1A2C15
5910-952-1708	3-6	1A1A3C22
5910-952-1708	3-6	1A1A4C30
5910-957-6843	3-50	9C1
5910-957-6843	3-50	9C2
5910-957-6843	3-51	10C2
5910-957-6843	3-51	10C3
5910-984-2174	3-10	1A2C26
5910-984-2174	3-30	1A10C10
5910-985-4334	3-26	1A8C21
5910-987-3594	3-26	1A8C51
5910-987-3594	3-26	1A8C65
5910-987-3594	3-30	1A10C9
5910-987-3594	3-39	1A13C2
5910-987-3594	3-39	1A13C6

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5910-989-5692		2C16
5910-992-5017	3-30	1A10C6
5910-992-5018	3-30	1A10C13
5910-992-5020	3-10	1A2C2
5910-992-5020	3-10	1A2C4
5910-992-5020	3-10	1A2C5
5910-992-5020	3-10	1A2C10
5910-992-5020	3-10	1A2C12
5910-992-5020	3-10	1A2C13
5910-992-5020	3-10	1A2C18
5910-992-5020	3-10	1A2C20
5910-992-5020	3-10	1A2C21
5910-992-5020	6-11	24
5910-992-5021	3-16	1A3C23
5910-992-5021	3-53	1A19C42
5310-992-5021	3-53	1A19C43
5910-992-5021	3-53	1A19C46
5910-992-5021	3-53	1A19C47
5910-993-3118	3-26	1A8C36
5910-996-0666	3-24	1A7C34
5910-996-0666	3-42	1A14C7
5910-996-0666	3-44	1A15C2
5910-998-1621	3-30	1A10C1
5910-998-1621	3-30	1A10C2
5910-998-1621	3-30	1A10C3
5910-998-1621	3-30	1A10C4

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE

TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5915-191-9359		1A22
5915-191-9360		1FL4
5915-463-4737	2-6	1FL1
5915-463-4737	2-6	1FL2
5915-463-4737	2-6	1FL3
5915-818-4832	3-53	1A19FL5
5915-910-2869	3-18	1A4FL1
5915-910-2870	3-16	1A3FL3
5915-910-2871	3-22	1A6FL2
5915-910-2872	3-16	1A3FL5
5915-910-2873	3-22	1A6FL1
5915-910-7123	3-18	1A4FL3
5915-910-7125	3-16	1A3FL2
5915-910-7126	3-16	1A3FL4
5915-910-7127	3-16	1A3FL1
5915-910-7128	3-18	1A4FL2
5920-012-0151		1F1
5920-012-0151	-12	9F2
	3-2	
5920-050-4953		1A20F3
5920-142-7439		1A20XF3
5920-557-2647		1F2
5920-681-4353	-12	10F2
	3-2	
5930-369-9271	2-3	1S6A
5930-369-9271	2-3	1S6B
5930-518-4531	2-3	1S1
5930-543-1237	2-3	1S7
5930-583-6582	2-3	1S5
5930-655-1582	2-2	1S1
5930-655-1582	2-2	1S3
5930-655-1582	2-2	1S4
5930-655-1582	4-4	36
5930-909-7356	2-8	11S1
5930-910-2865	4-4	30
5930-910-4134	3-34	1A11S1
5930-910-4135	3-37	1A12S1
5930-910-4138	3-31	51
5935-022-9148		1A20J37
5935-022-9148		1A20J39
5935-022-9148		1A20J41
5935-129-9358		1XV1
5935-129-9358		1XV2
5935-129-9358		1XV3
5935-149-4066	4-4	48
5935-258-9961		1J38
5935-498-2066		1J24
5935-498-2067		1J28
5935-498-2067		1J40
5935-498-2075		1J26
5935-498-2076		1J18
5935-498-2088	3-24	1A7J20
5935-704-3506	3-10	1A2J43
5935-704-3506	3-16	1A3J33
5935-704-3506	3-16	1A3J34
5935-704-3506	3-16	1A3J35
5935-704-3506	3-16	1A3J36
5935-704-3506	3-16	1A3J42
5935-704-3506	3-18	1A4J12
5935-704-3506	3-18	1A4J13
5935-704-3506	3-18	1A4J14
5935-704-3506	3-18	1A4J15
5935-704-3506	3-18	1A4J16
5935-704-3506	3-18	1A4J17
5935-704-3506	3-22	1A6J7
5935-704-3506	3-22	1A6J8
5935-704-3506	3-22	1A6J9
5935-704-3506	3-22	1A6J10
5935-704-3506	3-22	1A6J11
5935-704-3506	3-24	1A7J22
5935-704-3506	3-26	1A8J24
5935-704-3506	3-26	1A8J25
5935-732-0545	2-2	1J100
5935-795-3004		1A23P38
5935-801-8314	-12	11P1
	1-2	
5935-814-8601	2-3	1J4
5935-822-7614		1J1
5935-822-7614		1J2
5935-883-8140	2-3	1J3
5935-883-8140	2-8	11J2
5935-892-9035	4-3	2A1J3
5935-909-5712	3-46	1A16P26
5935-909-5712	3-46	11A1J1
5935-910-2877		1J23
5935-910-4616	2-8	11J1
5935-910-4624	3-26	1A8P23
5935-910-8239	4-3	2A1J1
5935-924-9420	2-6	1J30
5935-941-8990	3-6	1A1A6XV2
5935-941-8991	3-6	1A1A6XV1
5940-660-3759	3-6	1A1A1E99
5940-660-3759	3-6	1A1A1E100
5940-660-3759	3-6	1A1A1E102
5940-660-3759	3-6	1A1A1E104
5940-660-3759	3-6	1A1A1E106
5940-660-3759	3-6	1A1A1E108
5940-660-3759	3-6	1A1A2E103
5940-660-3759	3-6	1A1A2E105
5940-660-3759	3-6	1A1A2E107
5940-660-3759	3-6	1A1A2E109
5940-660-3759	3-6	1A1A2E114
5940-660-3759	3-6	1A1A2E115
5940-660-3759	3-6	1A1A3E121
5940-660-3759	3-6	1A1A3E122
5940-660-3759	3-6	1A1A3E123
5940-660-3759	3-6	1A1A4E128
5940-660-3759	3-6	1A1A4E129
5940-660-3759	3-6	1A1A4E130
5940-660-3759	3-6	1A1A5E124
5940-660-3759	3-6	1A1A5E127
5940-660-3759	3-6	1A1A5E134
5940-660-3759	3-6	1A1A5E138
5940-660-3759	3-6	1A1A5E142
5940-660-3759	3-6	1A1A5E146
5940-660-3759	3-6	1A1A5E147
5940-660-3759	3-6	1A1A5E148
5940-660-3759	3-6	1A1A5E170
5940-660-3759	3-6	1A1A5E171
5940-660-3759	3-6	1A1A5E172
5940-660-3759	3-6	1A1A5E173
5940-660-3759	3-6	1A1A5E174
5940-660-3759	3-6	1A1A5E175
5940-660-3759	3-6	1A1A5E176
5940-660-3759	3-6	1A1A5E177
5940-660-3759	3-6	1A1A5E178
5940-660-3759	3-6	1A1A5E179
5940-660-3759	3-6	1A1A5E180
5940-660-3759	3-6	1A1A5E181
5940-660-3759	3-6	1A1A6E55
5940-660-3759	3-6	1A1A6E56
5940-660-3759	3-6	1A1A6E57
5940-660-3759	3-6	1A1A6E58
5940-660-3759	3-6	1A1A6E59
5940-660-3759	3-6	1A1A6E60
5940-660-3759	3-6	1A1A6E62
5940-660-3759	3-10	1A2E81
5940-660-3759	3-10	1A2E83
5940-660-3759	3-10	1A2E84
5940-660-3759	3-10	1A2E85

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE

TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5940-660-3759	3-10	1A2E86
5940-660-3759	3-10	1A2E87
5940-660-3759	3-10	1A2E88
5940-660-3759	3-10	1A2E89
5940-660-3759	3-10	1A2E90
5940-660-3759	3-10	1A2E91
5940-660-3759	3-16	1A3E55
5940-660-3759	3-16	1A3E56
5940-660-3759	3-16	1A3E57
5940-660-3759	3-16	1A3E165
5940-660-3759	3-16	1A3E182
5940-660-3759	3-16	1A3E183
5940-660-3759	3-16	1A3E184
5940-660-3759	3-22	1A6E61
5940-660-3759	3-22	1A6E62
5940-660-3759	3-22	1A6E63
5940-660-3759	3-22	1A6E188
5940-660-3759	3-22	1A6E189
5940-660-3759	3-22	1A6E190
5940-660-3759	3-24	1A7E167
5940-660-3759	3-30	1A10E8
5940-660-3759	3-30	1A10E9
5940-660-3759	3-30	1A10E10
5940-660-3759	3-30	1A10E11
5940-660-3759	3-30	1A10E12
5940-660-3759	3-30	1A10E13
5940-660-3759	3-33	1A11E18
5940-660-3759		1A11E19
5940-660-3759		1A11E20
5940-660-3759		1A11E21
5940-660-3759		1A11E22
5940-660-3759		1A11E23
5940-660-3759	3-36	1A12E20
5940-660-3759	3-36	1A12E31
5940-660-3759	3-36	1A12E32
5940-660-3759	3-36	1A12E33
5940-660-3759	3-36	1A12E34
5940-660-3759	3-36	1A12E35
5940-660-3759	3-39	1A13E42
5940-660-3759	3-39	1A13E43
5940-660-3759	3-39	1A13E44
5940-660-3759	3-39	1A13E45
5940-660-3759	3-39	1A13E46
5940-660-3759	3-39	1A13E47
5940-951-3922		9E10
5945-453-9436	3-51	10K1
5945-578-9991	3-50	9K1
5945-910-2846	2-3	1K1
5945-914-2323	3-24	1A7K1
5950-027-2761	3-20	1A5L2
5950-060-9188		1L7
5950-060-9188	3-10	1A2L1
5950-060-9188	3-10	1A2L2
5950-060-9188	3-10	1A2L3
5950-060-9188	3-10	1A2L4
5950-060-9188	3-18	1A4L2
5950-060-9188	3-24	1A7L1
5950-060-9188	3-24	1A7L2
5950-060-9188	3-24	1A7L3
5950-060-9188	3-26	1A8L2
5950-060-9188	6-11	18
5950-061-6260	3-22	1A6L2
5950-088-1720		1L1
5950-088-1720		1L2
5950-088-1720		1L3
5950-088-1720	3-16	1A3L1
5950-088-1720	3-16	1A3L2
5950-088-1720	3-16	1A3L3
5950-088-1720	3-16	1A3L4
5950-088-1720	2-16	1A3L5
5950-088-1720	3-16	1A3L6
5950-088-1720	3-16	1A3L7
5950-088-1720	3-22	1A6L1
5950-088-1720	3-22	1A6L3
5950-088-1720	3-22	1A6L4
5950-088-1720	3-22	1A6L5
5950-088-1720	3-22	1A6L6
5950-088-1720	3-24	1A7L4
5950-088-1720	3-24	1A7L5
5950-088-1720	3-30	1A10L2
5950-088-1720	3-33	1A11L1
5950-088-1720	3-36	1A12L3
5950-088-1720	3-39	1A13L2
5950-239-2966	3-10	1A2T3
5950-239-2966	3-10	1A2T4
5950-486-8597	3-26	1A8L4
5950-498-2068	3-10	1A2T2
5950-498-2069	3-18	1A4T1
5950-498-2069	3-18	1A4T4
5950-498-2069	3-28	1A9T1
5950-498-2071	3-16	1A3T1
5950-498-2071	3-16	1A3T2
5950-498-2072	3-18	1A4T2
5950-498-2072	3-18	1A4T3
5950-498-2072	3-22	1A6T1
5950-498-2072	3-24	1A7T1
5950-498-2072	3-24	1A7T2
5950-498-2072	3-24	1A7T3
5950-498-2072	3-24	1A7T4
5950-498-2072	3-24	1A7T5
5950-498-2072	3-24	1A7T6
5950-498-2072	3-24	1A7T7
5950-498-2072	3-26	1A8T6
5950-498-2072	3-26	1A8T7
5950-498-2072	3-26	1A8T8
5950-498-2074	3-28	1A9L2
5950-498-2077	4-3	2A1L1
5950-498-2078	4-4	6
5950-498-3501	5-3	11A2
5950-498-3507	2-2	1L4
5950-498-4715	4-4	7
5950-581-8934	3-10	1A2L6
5950-581-8934	3-20	1A5L1
5950-583-1347	3-36	1A12L1
5950-583-1347	3-36	1A12L2
5950-583-1347	3-39	1A13L1
5950-683-3989	3-33	1A11L2
5950-769-4326	3-10	1A2L7
5950-769-4326	3-16	1A3L8
5950-814-1608		1L8
5950-814-1608		1L9
5950-814-1608	4-3	2A1L2
5950-814-1608	4-3	2A1L3
5950-815-7306	3-10	1A2L5
5950-893-0434	3-39	1A13L3
5950-905-1839	3-30	1A10L1
5950-910-0175	2-2	1T1
5950-910-2790	3-26	1A8T3
5950-910-2790	3-26	1A8T5
5950-910-2790	5-3	11A2T1
5950-910-2790	5-3	11A2T2
5950-910-2794	2-6	1L5
5950-910-4153	3-51	10T1
5950-910-4154	3-50	9T1
5950-941-6194	3-28	1A9L1
5955-462-8455	3-22	1A6Y1
5955-910-2801	3-30	1A10Y6
5955-910-2802	3-36	1A12Y10
5955-910-2803	3-18	1A4Y1
5955-910-2804	3-39	1A13Y2

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE

TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5955-910-2805	3-39	1A13Y3
5955-910-2806	3-39	1A13Y4
5955-910-2807	3-39	1A13Y5
5955-910-2808	3-39	1A13Y6
5955-910-2809	3-39	1A13Y8
5955-910-2810	3-39	1A13Y9
5955-910-2811	3-39	1A13Y10
5955-910-2812	3-39	1A13Y1
5955-910-2859	3-36	1A12Y6
5955-910-2861	3-36	1A12Y8
5955-910-2862	3-36	1A12Y9
5955-910-2863	3-39	1A13Y7
5955-910-2867	3-36	1A12Y4
5955-910-2868	3-36	1A12Y5
5955-910-2878	3-30	1A10Y1
5955-910-2879	3-30	1A10Y2
5955-910-2880	3-30	1A10Y3
5955-910-2881	3-33	1A11Y1
5955-910-2882	3-33	1A11Y2
5955-910-2883	3-30	1A10Y4
5955-910-2884	3-33	1A11Y3
5955-910-2885	3-33	1A11Y4
5955-910-2886	3-33	1A11Y5
5955-910-2887	3-33	1A11Y6
5955-910-2888	3-33	1A11Y7
5955-910-4115	3-33	1A11Y8
5955-910-4116	3-33	1A11Y9
5955-910-4117	3-33	1A11Y10
5955-910-4118	3-30	1A10Y5
5955-910-4119	3-30	1A10Y7
5955-910-4120	3-30	1A10Y8
5955-910-4121	3-30	1A10Y9
5955-910-4123	3-30	1A10Y12
5955-910-4124	3-30	1A10Y13
5955-910-4125	3-36	1A12Y1
5955-910-4126	3-36	1A12Y2
5955-910-4127	3-36	1A12Y3
5955-910-8238	3-30	1A10Y11
5955-910-8240	3-30	1A10Y10
5955-911-2498	3-36	1A12Y7
5960-052-8984	3-4	1A1Y2
5960-272-9094	6-11	1A1MP27
5960-519-9834	6-11	1A1MP28
5960-904-9744	2-6	1Y1
5960-904-9744	2-6	1Y2
5960-904-9744	2-6	1Y3
5960-985-8987	3-4	1A1Y1
5961-044-2606	3-50	9Q1
5961-044-2606	3-50	9Q2
5961-058-1192	3-46	1A16Q6
5961-058-1192	3-46	11A1Q6
5961-105-9716	3-16	1A3Q8
5961-105-9716	3-16	1A3Q9
5961-105-9716	3-22	1A6Q1
5961-105-9716	3-22	1A6Q2
5961-105-9716	3-22	1A6Q3
5961-225-9616	3-28	1A9CR1
5961-465-6555		1Q3
5961-465-6555	3-20	1A5Q1
5961-465-6555	3-24	1A7Q9
5961-465-6555	3-46	1A16Q1
5961-465-6555	3-46	1A16Q3
5961-556-2091		1CR20
5961-556-2091		1CR21
5961-556-2091		1CR24
5961-556-2091	3-6	1A1A6CR1
5961-556-2091	3-10	1A2CR3
5961-556-2091	3-10	1A2CR4
5961-556-2091	3-10	1A2CR5
5961-556-2091	3-10	1A2CR6
5961-556-2091	3-10	1A2CR7
5961-556-2091	3-10	1A2CR8
5961-556-2091	3-10	1A2CR9
5961-556-2091	3-10	1A2CR10
5961-556-2091	3-10	1A2CR11
5961-556-2091	3-10	1A2CR16
5961-556-2091	3-16	1A3CR1
5961-556-2091	3-16	1A3CR2
5961-556-2091	3-16	1A3CR3
5961-556-2091	3-16	1A3CR4
5961-556-2091	3-18	1A4CR1
5961-556-2091	3-18	1A4CR2
5961-556-2091	3-18	1A4CR3
5961-556-2091	3-18	1A4CR8
5961-556-2091	3-22	1A6CR1
5961-556-2091	3-22	1A6CR2
5961-556-2091	3-22	1A6CR3
5961-556-2091	3-22	1A6CR4
5961-556-2091	3-22	1A6CR5
5961-556-2091	3-22	1A6CR6
5961-556-2091	3-22	1A6CR7
5961-556-2091	3-22	1A6CR8
5961-556-2091	3-22	1A6CR9
5961-556-2091	3-22	1A6CR10
5961-556-2091	3-22	1A6CR11
5961-556-2091	3-22	1A6CR12
5961-556-2091	3-22	1A6CR13
5961-556-2091	3-22	1A6CR14
5961-556-2091	3-22	1A6CR15
5961-556-2091	3-22	1A6CR16
5961-556-2091	3-24	1A7CR1
5961-556-2091	3-24	1A7CR2
5961-556-2091	3-24	1A7CR3
5961-556-2091	3-24	1A7CR4
5961-556-2091	3-24	1A7CR5
5961-556-2091	3-24	1A7CR6
5961-556-2091	3-24	1A7CR7
5961-556-2091	3-26	1A8CR2
5961-556-2091	3-26	1A8CR3
5961-556-2091	3-26	1A8CR4
5961-556-2091	3-26	1A8CR5
5961-556-2091	3-26	1A8CR7
5961-556-2091	3-26	1A8CR8
5961-728-6941	3-46	1A16Q5
5961-728-6941	3-46	11A1Q5
5961-752-0179	3-6	1A1A6CR2
5961-752-6119	3-18	1A4Q7
5961-752-6119	3-24	1A7Q1
5961-752-6119	3-24	1A7Q2
5961-752-6119	3-24	1A7Q3
5961-752-6119	3-24	1A7Q6
5961-760-9548	4-3	2A1CR1
5961-760-9548	4-3	2A1CR2
5961-767-9412	3-10	1A2CR1
5961-767-9412	3-18	1A4CR9
5961-767-9412	3-26	1A8CR9
5961-814-0768		1CR22
5961-814-0768	3-18	1A4CR4
5961-814-0768	3-18	1A4CR5
5961-814-0768	3-18	1A4CR6
5961-814-0768	3-18	1A4CR7
5961-814-0768	3-20	1A5CR1
5961-814-0768	3-20	1A5CR2
5961-814-0768	3-26	1A8CR6
5961-814-0768	3-26	1A8CR10
5961-814-0768	3-26	1A8CR11
5961-814-0768	3-26	1A8CR12
5961-814-0768	3-26	1A8CR13
5961-814-0768	3-26	1A8CR14
5961-820-9059	3-10	1A2Q5

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

FEDERAL STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER OR REF. DESIGNATION
5961-820-9059	3-10	1A2Q6
5961-820-9059	3-10	1A2Q7
5961-820-9059	3-10	1A2Q9
5961-820-9059	3-10	1A2Q10
5961-820-9059	3-10	1A2Q11
5961-820-9059	3-10	1A2Q13
5961-820-9059	3-10	1A2Q15
5961-824-8448	3-50	9CR5
5961-835-0683	3-44	1A15Q1
5961-836-6667	3-10	1A2CR2
5961-836-6667	3-10	1A2CR12
5961-836-6667	3-10	1A2CR13
5961-836-6667	3-10	1A2CR14
5961-836-6667	3-10	1A2CR15
5961-836-6667		1A20CR23
5961-842-6937	3-10	1A2Q4
5961-842-6937	3-10	1A2Q8
5961-842-6937	3-10	1A2Q12
5961-842-6937	3-10	1A2Q14
5961-842-6937	3-10	1A2Q20
5961-842-6937	3-30	1A10Q2
5961-842-6937	3-33	1A11Q2
5961-842-6937	3-36	1A12Q2
5961-842-6937	3-39	1A13Q2
5961-842-6937	3-44	1A15Q2
5961-877-6704	3-24	1A7Q10
5961-877-6704	3-42	1A14Q2
5961-877-6704		1A20Q1
5961-877-6704		1A20Q2
5961-883-5305	3-26	1A8Q4
5961-883-5305	3-26	1A8Q6
5961-883-5305	3-26	1A8Q7
5961-883-5305	3-26	1A8Q8
5961-901-4862	3-6	1A1A6Q1
5961-901-4862	3-18	1A4Q4
5961-901-4862	3-18	1A4Q5
5961-901-4862	3-26	1A8Q9
5961-901-4862	3-26	1A8Q10
5961-901-4862	3-42	1A14Q1
5961-901-4862	3-46	1A16Q2
5961-901-4862	3-46	1A16Q4
5961-901-4862	3-46	11A1Q2
5961-901-4862	3-46	11A1Q4
5961-912-9008	3-10	1A2Q1
5961-912-9008	3-10	1A2Q2
5961-912-9008	3-10	1A2Q3
5961-912-9008	3-26	1A8Q5
5961-921-3781		1CR13
5961-921-3781		1CR14
5961-921-3781		1CR15
5961-921-3781		1CR16
5961-921-3781		1CR19
5961-921-3781	3-42	1A14CR1
5961-921-3781	3-44	1A15CR1
5961-921-3781	3-46	1A16CR1
5961-921-3781		1A20CR17
5961-921-3781		1A20CR18
5961-921-3781	3-50	9CR1
5961-921-3781	3-50	9CR2
5961-921-3781	3-50	9CR3
5961-921-3781	3-50	9CR4
5961-921-3781	3-51	10CR1
5961-921-3781	3-51	10CR2
5961-921-3781	3-46	11A1CR1
5961-921-3781	6-11	21
5961-929-2561	3-46	11A1Q1
5961-929-2561	3-46	11A1Q3
5961-944-8714		1A20CR12
5961-972-9395		1CR1
5961-972-9395		1CR2
5961-972-9395		1CR3
5961-972-9395		1CR4
5961-972-9395		1CR5
5961-972-9395		1CR6
5961-972-9395		1CR7
5961-972-9395		1CR8
5961-972-9395		1CR9
5961-972-9395		1CR10
5961-972-9395		1CR11
5961-998-1920	3-10	1A2Q16
5961-998-1920	3-10	1A2Q17
5961-998-1920	3-10	1A2Q18
5961-998-1920	3-10	1A2Q19
5961-998-1920	3-16	1A3Q1
5961-998-1920	3-16	1A3Q2
5961-998-1920	3-16	1A3Q3
5961-998-1920	3-16	1A3Q4
5961-998-1920	3-16	1A3Q5
5961-998-1920	3-16	1A3Q6
5961-998-1920	3-16	1A3Q7
5961-998-1920	3-18	1A4Q1
5961-998-1920	3-18	1A4Q2
5961-998-1920	3-18	1A4Q3
5961-998-1920	3-18	1A4Q6
5961-998-1920	3-24	1A7Q4
5961-998-1920	3-24	1A7Q5
5961-998-1920	3-24	1A7Q7
5961-998-1920	3-24	1A7Q8
5961-998-1920	3-26	1A8Q3
5961-998-1920	3-28	1A9Q1
5961-998-1920	3-28	1A9Q2
5961-998-1920	3-28	1A9Q3
5961-998-1920	3-28	1A9Q4
5961-998-1920	3-30	1A10Q1
5961-998-1920	3-33	1A11Q1
5961-998-1920	3-39	1A13Q1
5965-102-8521	-12	11HS1
	1-2	
5965-241-3745	2-8	11LS1
5970-841-1255	4-4	29
5985-733-6042	2-5	12E4
5985-733-6043	2-5	12E3
5985-733-6044	2-5	12E2
5985-733-6045	2-5	12E1
5995-136-2332		1W1
5995-136-4982	3-16	1W10
5995-245-1881	3-10	1W1
5995-245-1884	3-10	1W2
5995-245-1893	3-10	1W3
5995-245-1894	3-10	1W4
5995-251-2609	3-16	1W5
5995-251-2610	2-2	1W6
5995-251-2611	6-11	1A1W1
5995-403-7075	2-4	1W7
5995-403-7076	2-4	1W8
5995-403-7077	2-2	1W9
6625-135-6710	2-2	1M1
6625-246-4546	4-4	35

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE

TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

REFERENCE NO.	MFG. CODE	FIG NO.	ITEM NUMBER OR REF. DESIGNATION
A0016	14304	-12	11HS1
		1-2	
A10103DAP	07047		1A1A6MP5
CD15C050J500	93790	3-6	1A1A1C8
CD15C050J500	93790	3-6	1A1A1C12
CD15C050J500	93790	3-6	1A1A2C5
CD15C050J500	93790	3-6	1A1A3C27
CD15C050J500	93790	3-6	1A1A4C35
CD15C050J500	93790	3-10	1A2C7
CD15C050J500	93790	3-10	1A2C15
CD15C100J500	93790	3-6	1A1A1C9
CD15C100J500	93790	3-10	1A3C23
CD15C150J500	93790	3-6	1A1A1C10
CD15E270J500	93790	3-6	1A1A1C11
CD15E270J500	93790	3-18	1A4C15
CD15E430J500	93790	3-6	1A1A6C53
CD15F131J500	93790	3-16	1A3C7
CD15F131J500	93790	3-16	1A3C32
CD15F131J500	93790	3-16	1A3C35
CD15F820J500	93790	3-6	1A1A6C50
CD15F820J500	93790	3-10	1A2C44
CD15F820J500	93790	3-33	1A11C2
CD19F102J500	93790	3-6	1A1A5C41
CD19F102J500	93790	3-6	1A1A5C61
CD19F102J500	93790	3-6	1A1A6C47
CK08L331G	90634	3-10	1A2C36
DDM103	71590		1A22C53
DDM103	71590		1A22C54
DDM103	71590		1A22C55
DMF1P22	93790	3-10	1A2C31
DMF1P22	93790	3-42	1A14C2
DM15E820G	72136	3-6	1A1A1C2
DM15E820G	72136	3-6	1A1A2C14
DM15E820G	72136	3-6	1A1A3C21
DM15E820G	72136	3-6	1A1A4C29
G14-30P3	00141	3-55	10
HXLWX15A	71400	2-3	1XF2
HKXW22-33V	71400	2-3	1XF1
H0127	14304	3-40	1
H0196	14304	6-11	73
H0258	14304	3-22	1A6H2
H0258	14304	3-22	1A6H3
H0258	14304	3-42	1A14H2
H0258	14304	6-11	10
H0258	14304	6-11	105
H0258	14304	6-11	115
H0285	14304	6-11	64
H0286	14304	3-42	1A14H2
H0286	14304	3-40	3
H0286	14304	3-34	4
H0286	14304	3-37	4
H0286	14304	6-11	4
H0286	14304	3-31	9
H0286	14304	3-34	13
H0286	14304	3-37	13
H0286	14304	3-31	19
H0504	14304	6-11	93
H0504	14304	6-11	96
H0610	14304	6-11	5
H0610	14304	3-40	20
H0617	14304	6-11	118
H4181	14304	6-11	91
H4181	14304	6-11	94
H4342	14304	3-34	6
H4342	14304	3-37	6
H4342	14304	3-40	6
H4342	14304	3-31	12
H4510	14304	4-4	9
H4510	14304	4-4	11
H4510	14304	6-11	54
H4510	14304	6-11	75
H4511	14304	6-10	9
H4511	14304	4-4	10
H4511	14304	6-10	10
H4511	14304	6-10	23
H4600	14304	3-37	10
H4600	14304	3-40	15
H4600	14304	3-31	20
H4601	14304	3-34	10
H4602	14304	3-40	23
H4604	14304	3-55	24
H4608	14304	3-55	20
H4609	14304	4-4	23
H4609	14304	4-4	24
H4651	14304	6-11	114
H4701	14304	6-11	97
H4701	14304	6-11	98
H4704	14304	6-11	92
H4704	14304	6-11	95
H4704	14304	6-11	117
H4705	14304	3-34	8
H4705	14304	3-37	8
H4705	14304	3-40	8
H4705	14304	3-31	15
H4810	14304	4-4	4
H4813	14304	4-4	16
H4813	14304	4-4	20
H5083	14304	3-54	1
H5084	14304	3-54	7
ID0-001	71590	3-6	1A1A6C42
ID0-001	71590	3-6	1A1A6C49
ID0-001	71590	3-42	1A14C1
JA1P042F102AA	01121	2-2	1R20
KH4437	77342	2-3	1K2
KH4437	77342	2-3	1K3
KH4437	77342	2-3	1K4
KH4437	77342	6-11	17
LP17-500	16299		1R16
MHT1851	21845	3-51	10Q1
MHT1851	21845	3-51	10Q2
MP0283	14304	3-55	5
MS35206-214	96906	3-55	2
MS35206-214	96906	3-55	15
MS35206-214	96906	3-55	18
MS35206-214	96906	3-55	22
MS35333-74	96906	3-55	30
MS35339-40	96906	3-55	16
MS35339-40	96906	3-55	19
MS35339-40	96906	3-55	23
MS51021-9	96906	3-55	28
RG178BU	80058		1A1A5W1
RG178BU	80058	3-4	1A1A6W1W1
SS0CH	93713	3-42	1A14MP1
SS0-8	93713	3-42	1A14T1
S33-20C3MI	05079	3-26	1A8C24
S33-20C3MI	05079	3-26	1A8C31
S33-20C3MI	05079	3-42	1A14C4
S33-20C3MI	05079	3-44	1A15C1
TS10W1R5J	02985	3-51	10R2
TS10W2R0J	02985	3-50	9R2
TS2W332J	02985	3-6	1A1A6R12
TS2W471J	02985	3-6	1A1A6R18
TS5W123J	02985	3-6	1A1A6R11
TS5W221K	02985	3-50	9R3
VY13C191G	95275	3-28	1A9C3
W0006	14304		1A1A5W2
02-005-111-5200	91662	3-28	1A9J40
02-005-111-5200	91662	3-42	1A14P24
02-005-111-5200	91662	3-44	1A15P28
02-005-113-6200	91662	3-6	1A1A6J31

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE

TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

REFERENCE NO.	MFG. CODE	FIG NO.	ITEM NUMBER OR REF. DESIGNATION
02-006-111-5200	91662	3-18	1A4P18
1007-12	04183	2-2	1MP91
103900	73734	6-11	6
1-16-2NA	95987	6-11	65
129515	93734	3-31	11
1303-196	16733	3-16	1W10J46
1303-196	16733	6-11	30
1306-196	16733	2-4	1P7
1306-196	16733	2-4	1P8
1306-196	16733		1P10
1306-196	16733	2-2	1P12
1306-196	16733	2-2	1P13
1306-196	16733	2-2	1P16
1306-196	16733	2-2	1P17
1306-196	16733	2-2	1P24
1306-196	16733	2-4	1P33
1306-196	16733	2-4	1P34
1306-196	16733	2-4	1P35
1306-196	16733	2-4	1P42
1306-196	16733	2-4	1P43
1306-196	16733	3-10	1W1P36
1306-196	16733	3-10	1W2P46
1306-196	16733	3-10	1W3P14
1306-196	16733	3-10	1W4P15
1306-196	16733	3-16	1W5P9
1306-196	16733	2-2	1W6P22
1306-196	16733	2-2	1W6P25
1306-196	16733	2-4	1W7P11
1306-196	16733	2-4	1W7P46
1306-196	16733	2-4	1W8J43
1306-196	16733	2-2	1W9P17
1306-196	16733	2-2	1W9P24
1306-196	16733	3-4	1A1A6W1P30
1610	73734	2-3	1MP115
1610	73734	2-3	1MP115A
1610	73734	2-3	1MP115B
1610	73734	2-3	1MP115C
162-0096	14304	2-2	1MP48
162-0108	14304		1A23
162-0124	14304	2-3	1MP150
162-0143	14304	3-55	7
162-0144	14304	3-55	27
162-0147	14304	3-54	6
162-0147	14304	3-55	9
162-0147	14304	6-11	52
162-0147	14304	6-11	57
162-0150	14304	2-3	1S2
162-0188	14304	2-3	1A20
162-0193	14304	3-6	1A1A1Y2
162-0194	14304	3-6	1A1A2Y3
162-0195	14304	3-6	1A1A2Y4
162-0196	14304	3-6	1A1A1Y1
162-0200	14304	3-4	1A1
162-0203	14304		1A1A1MP1
162-0204	14304		1A1A2MP1
162-0205	14304		1A1A3MP1
162-0212	14304		1A1A4MP1
162-0226	14304	6-11	1
162-0227	14304	6-11	51
162-0230	14304	6-11	58
162-0232	14304	6-11	35
162-0234	14304	6-11	80
162-0234	14304	6-11	85
162-0234	14304	6-11	88
162-0237	14304	6-11	50
162-0237	14304	6-11	56
162-0241	14304	6-11	36
162-0242	14304	6-11	59
162-0246	14304	6-11	38
162-0246	14304	6-11	44
162-0249	14304	6-11	35
162-0250	14304	3-6	1A1A5
162-0256	14304		1A1A5MP5
162-0266	14304		1A1A6MP6
162-0276	14304	3-6	1A1A5L1
162-0276	14304	3-6	1A1A5L3
162-0278	14304	3-6	1A1A5L2
162-0278	14304	3-6	1A1A5L4
162-0283	14304	3-6	1A1A1S1A
162-0283	14304	3-6	1A1A2S1B
162-0283	14304	3-6	1A1A3S1C
162-0283	14304		1A1A4S1D
162-0286	14304	6-11	107
162-0306	14304	3-10	1A2MP1
162-0309	14304		1A21
162-0321	14304	3-4	1A1A6W1
162-0324	14304		1A21J3
162-0332	14304		1MP149
162-0335	14304	3-55	25
162-0337	14304	3-55	12
162-0373	14304	2-2	1P31
162-0375	14304		1P20
162-0378	14304	6-10	6
162-0400	14304	3-16	1A3
162-0500	14304	3-18	1A4
162-0551	14304	3-20	1A5MP1
162-0606	14304	3-22	1A6MP1
162-0607	14304	3-22	1A6MP2
162-0607	14304	3-22	1A6MP3
162-0609	14304	3-22	1A6MP4
162-0706	14304	3-24	1A7MP1
162-0750	14304	3-54	1MP71
162-0752	14304	3-54	4
162-0753	14304	3-54	8
162-0754	14304	3-54	13
162-0755	14304	3-54	9
162-0755	14304	3-54	10
162-0755	14304	3-54	11
162-0756	14304	3-54	8
162-0757	14304	3-54	4
162-0758	14304	3-54	12
162-0759	14304	3-54	5
162-0760	14304	3-54	4
162-0761	14304	3-54	3
162-0762	14304	3-54	13
162-0763	14304	3-54	2
162-0800	14304	3-26	1A8
162-0900	14304	3-55	1MP70
162-0901	14304	3-28	1A9
162-0911	14304	3-55	21
162-0912	14304	3-55	1
162-0914	14304	3-55	4
162-0917	14304	3-55	6
162-0918	14304	3-55	14
162-0919	14304	3-55	12
162-0920	14304	3-55	1
162-1004	14304	3-31	14
162-1007	14304	3-31	21
162-1024	14304	3-31	13
162-1106	14304	3-34	21
162-1107	14304	3-34	9
162-1126	14304	3-34	7
162-1206	14304	3-37	21
162-1207	14304	3-37	9
162-1226	14304	3-37	7
162-1305	14304	3-40	14
162-1306	14304	3-40	22
162-1307	14304	3-40	17

SECTION IV. INDEX-FEDERAL STOCK NUMBER CROSS REFERENCE

TO FIGURE AND ITEM NUMBER OR REFERENCE DESIGNATION (CONTINUED)

REFERENCE NO.	MFG. CODE	FIG NO.	ITEM NUMBER OR REF. DESIGNATION
162-1308	14304	3-40	1A13S1
162-1309	14304	3-40	9
162-1326	14304	3-40	7
162-1506	14304	3-42	1A14MP2
162-1606	14304	3-44	1A15MP1
162-1900	14304	3-53	1A19
162-2118	14304	4-4	1
162-2119	14304	4-4	22
162-2120	14304	4-4	42
162-2122	14304	4-4	27
162-2157	14304	4-4	33
162-2159	14304	4-4	28
162-2160	14304	4-4	3
162-2161	14304	4-4	40
162-2162	14304	4-4	13
162-2163	14304	4-4	37
1952	73734	6-11	1A1A5MP6
1952	73734	6-11	1A1A5MP7
1952	73734	6-11	1A1A5MP8
1952	73734		1A1A5MP9
1952	73734	3-34	5
1952	73734	3-37	5
1952	73734	6-11	8
1952	73734	6-11	15
1952	73734	6-11	22
1952	73734	6-11	77
1953	73734	6-11	27
19C291	56289		1C21
23022	73734	3-42	1A14H2
2308-91-5	17117	6-11	14
2BC4E113	02289	3-20	1A5K1
357-000X5U0152M	72982		1A21C63
357-000X5U0152M	72982		1A21C64
357-000X5U0152M	72982		1A21C65
357-000X5U0152M	72982		1A21C66
357-000X5U0152M	72982		1A21C67
357-000X5U0152M	72982		1A21C68
357-000X5U0152M	72982		1A21C69
357-000X5U0152M	72982		1A21C70
3878-010R2G0271J	72982		1C31
3Y8822RCL	18911	4-4	14
45G	73734	6-10	8
503-001-62F	72982	3-6	1A1A5C36
503-001-62F	72982	3-6	1A1A5C37
503-001-62F	72982	3-6	1A1A5C38
503-001-62F	72982	3-6	1A1A5C40
503-001-62F	72982	3-6	1A1A6C51
526-9364-000	13499	3-53	1A19FL6
538-011B2P090R	72982	3-22	1A3C10
538-011B2P090R	72982	3-22	1A6C13
538-011B2P090R	72982	3-22	1A6C20
538-011B2P090R	72982	3-22	1A6C22
538-011B2P090R	72982	3-16	1A3C20
538-011B2P090R	72982	3-16	1A3C34
5555-25MD	79136	3-55	13
5815-000Y5U0104Z	72982		1A22C52
600D227G020DG0	56289		1C11
600D227G020DG0	56289		1C56
600D227G020DG0	56289		1C58
600D227G020DG0	56289		1A20C9
600D227G020DG0	56289		1A20C10
656-003	72982	3-6	1A1A6C52
656-003	72982	3-20	1A5C1
71500	73734	6-11	1A1A5MP6H1
71500	73734	6-11	1A1A5MP7H1
71500	73734	6-11	1A1A5MP8H1
71500	73734	6-11	1A1A5MP9H1
71500	73734	3-40	21
79-022-094-0500	72962	3-55	8
8000	73734	6-11	39
8000	73734	6-11	45
8001	73734	6-11	23
811-000S2H0101G	72982	3-28	1A9C12
9434-60-20075	80583	3-55	31
9506BB0256-3A	06540	3-20	1A5MP2
9506BB0256-3A	06540	3-20	1A5MP3

SECTION V. INDEX- REFERENCE DESIGNATION

CROSS REFERENCE TO PAGE NUMBER

REFERENCE DESIGNATION	PAGE NUMBER
1C1	B-55
1C2	B-56
1C3	B-55
1C4	B-53
1C5	B-55
1C6	B-56
1C7	B-53
1C11	B-55
1C12	B-53
1C13	B-53
1C14	B-53
1C15	B-53
1C16	B-53
1C17	B-53
1C18	B-53
1C19	B-53
1C20	B-53
1C21	B-53
1C22	B-53
1C23	B-53
1C24	B-54
1C25	B-54
1C26	B-54
1C27	B-54
1C28	B-54
1C29	B-54
1C30	B-54
1C31	B-54
1C32	B-54
1C33	B-54
1C34	B-54
1C35	B-54
1C36	B-54
1C37	B-54
1C39	B-54
1C40	B-55
1C49	B-54
1C50	B-55
1C51	B-122
1C56	B-55
1C57	B-122
1C58	B-55
1C60	B-55
1C61	B-55
1C62	B-55
1C74	B-55
1C80	B-56
1C81	B-55
1C82	B-55
1C83	B-55
1CR1	B-118
1CR2	B-118
1CR3	B-118
1CR4	B-118
1CR5	B-118
1CR6	B-118
1CR7	B-118
1CR8	B-118
1CR9	B-118
1CR10	B-118
1CR11	B-118
1CR13	B-118
1CR14	B-118
1CR15	B-119
1CR16	B-119
1CR19	B-119
1CR20	B-123
1CR21	B-123
1CR22	B-119
1CR24	B-123
1F1	B-65
1F2	B-65
1FL1	B-122
1FL2	B-122
1FL3	B-122
1FL4	B-122
1J1	B-59
1J2	B-59
1J3	B-59
1J4	B-59
1J18	B-59
1J23	B-59
1J24	B-59
1J26	B-60
1J28	B-60
1J30	B-60
1J38	B-60
1J40	B-60
1J100	B-70
1K1	B-113
1K2	B-113
1K3	B-113
1K4	B-113
1L1	B-58
1L2	B-58
1L3	B-58
1L4	B-112
1L5	B-58
1L7	B-58
1L8	B-122
1L9	B-58
1M1	B-144
1MP48	B-63
1MP70	B-66
1MP71	B-68
1MP91	B-70
1MP94	B-124
1MP95	B-125
1MP97	B-125
1MP115	B-117
1MP115A	B-117
1MP115B	B-117
1MP115C	B-118
1MP149	B-144
1MP150	B-144
1P7	B-58
1P8	B-58
1P10	B-122
1P12	B-58
1P13	B-58
1P16	B-58
1P17	B-58
1P20	B-58
1P24	B-58
1P31	B-58
1P33	B-59
1P34	B-59
1P35	B-59
1P42	B-59
1P43	B-59
1Q3	B-138
1R1	B-115
1R2	B-116
1R3	B-116
1R9	B-116
1R10	B-117
1R11	B-116
1R12	B-116
1R13	B-116
1R14	B-116
1R16	B-116
1R18	B-122
1R19	B-117
1R20	B-117
1R22	B-122
1R23	B-122
1R24	B-123
1R25	B-116
1R26	B-123
1R27	B-116
1R28	B-116
1R29	B-116
1R30	B-116
1R31	B-116
1R32	B-116
1R33	B-123
1R40	B-117
1R41	B-117
1R42	B-117
1R50	B-117
1R55	B-117
1R57	B-117
1S1	B-122
1S2	B-122
1S3	B-123
1S4	B-123
1S5	B-122
1S6A	B-122
1S6B	B-122
1S7	B-122
1T1	B-138
1V1	B-62
1V2	B-63
1V3	B-63
1W1	B-51
1W1P36	B-51
1W2	B-51
1W2P46	B-51
1W3	B-51
1W3P14	B-51
1W4	B-51
1W4P15	B-51
1W5	B-51
1W5P9	B-52
1W6	B-52
1W6P22	B-52
1W6P25	B-52
1W6P25	B-52
1W7P11	B-52
1W7P46	B-52
1W8	B-52
1W8J43	B-52
1W9	B-52
1W9P17	B-52
1W9P24	B-52
1W10	B-52
1W10J46	B-52
1XF1	B-65

CROSS REFERENCE TO PAGE NUMBER (CONTINUED)

REFERENCE DESIGNATION	PAGE NUMBER
1XF2	B-65
1XV1	B-120
1XV2	B-120
1XV3	B-120
1A1	B-26
1A1MP27	B-94
1A1MP28	B-94
1A1V1	B-41
1A1V2	B-93
1A1W1	B-40
1A1A1	B-26
1A1A1C1	B-27
1A1A1C2	B-27
1A1A1C3	B-27
1A1A1C4	B-27
1A1A1C6	B-27
1A1A1C7	B-27
1A1A1C8	B-27
1A1A1C9	B-27
1A1A1C10	B-27
1A1A1C11	B-27
1A1A1C12	B-27
1A1A1E99	B-28
1A1A1E100	B-28
1A1A1E102	B-28
1A1A1E104	B-28
1A1A1E106	B-28
1A1A1E108	B-33
1A1A1MP1	B-27
1A1A1R19	B-27
1A1A1R20	B-27
1A1A1S1A	B-27
1A1A1Y1	B-27
1A1A1Y2	B-27
1A1A2	B-28
1A1A2C5	B-28
1A1A2C13	B-28
1A1A2C14	B-28
1A1A2C15	B-28
1A1A2C16	B-28
1A1A2C17	B-28
1A1A2C18	B-28
1A1A2C19	B-28
1A1A2E103	B-29
1A1A2E105	B-29
1A1A2E107	B-29
1A1A2E109	B-29
1A1A2E114	B-29
1A1A2E115	B-29
1A1A2MP1	B-29
1A1A2R21	B-29
1A1A2R22	B-29
1A1A2S1B	B-29
1A1A2Y3	B-29
1A1A2Y4	B-29
1A1A3	B-29
1A1A3C20	B-30
1A1A3C21	B-29
1A1A3C22	B-29
1A1A3C23	B-30
1A1A3C24	B-30
1A1A3C25	B-30
1A1A3C26	B-30
1A1A3C27	B-30
1A1A3E121	B-30
1A1A3E122	B-30
1A1A3E123	B-31
1A1A3MP1	B-30
1A1A3R23	B-30
1A1A3R24	B-30
1A1A3R29	B-30
1A1A3S1C	B-30
1A1A4	B-31
1A1A4C28	B-31
1A1A4C29	B-31
1A1A4C30	B-31
1A1A4C31	B-31
1A1A4C32	B-31
1A1A4C33	B-31
1A1A4C34	B-31
1A1A4C35	B-31
1A1A4E128	B-32
1A1A4E129	B-32
1A1A4E130	B-32
1A1A4MP1	B-31
1A1A4R25	B-31
1A1A4R26	B-31
1A1A4S1D	B-31
1A1A5	B-32
1A1A5C36	B-33
1A1A5C37	B-33
1A1A5C38	B-33
1A1A5C40	B-33
1A1A5C41	B-33
1A1A5C61	B-33
1A1A5E124	B-34
1A1A5E127	B-34
1A1A5E134	B-34
1A1A5E138	B-34
1A1A5E142	B-34
1A1A5E146	B-34
1A1A5E147	B-34
1A1A5E148	B-34
1A1A5E170	B-34
1A1A5E171	B-34
1A1A5E172	B-34
1A1A5E173	B-34
1A1A5E174	B-34
1A1A5E175	B-34
1A1A5E176	B-34
1A1A5E177	B-34
1A1A5E178	B-35
1A1A5E179	B-35
1A1A5E180	B-35
1A1A5E181	B-35
1A1A5L1	B-35
1A1A5L2	B-35
1A1A5L3	B-35
1A1A5L4	B-35
1A1A5MP5	B-33
1A1A5MP6	B-33
1A1A5MP7	B-33
1A1A5MP8	B-33
1A1A5MP9	B-34
1A1A5MP6H1	B-33
1A1A5MP7H1	B-33
1A1A5MP8H1	B-34
1A1A5MP9H1	B-34
1A1A5R1	B-33
1A1A5R2	B-33
1A1A5W1	B-32
1A1A5W2	B-32
1A1A6	B-35
1A1A6C42	B-36
1A1A6C44	B-36
1A1A6C45	B-36
1A1A6C46	B-36
1A1A6C47	B-36
1A1A6C48	B-36
1A1A6C49	B-36
1A1A6C50	B-36
1A1A6C51	B-36
1A1A6C52	B-36
1A1A6C53	B-37
1A1A6C54	B-36
1A1A6C56	B-36
1A1A6C57	B-36
1A1A6CR1	B-38
1A1A6CR2	B-38
1A1A6E55	B-38
1A1A6E56	B-38
1A1A6E57	B-38
1A1A6E58	B-38
1A1A6E59	B-38
1A1A6E60	B-38
1A1A6E62	B-38
1A1A6J31	B-37
1A1A6MP5	B-37
1A1A6MP6	B-37
1A1A6Q1	B-38
1A1A6R3	B-37
1A1A6R4	B-37
1A1A6R5	B-37
1A1A6R6	B-37
1A1A6R7	B-37
1A1A6R8	B-37
1A1A6R10	B-37
1A1A6R11	B-38
1A1A6R12	B-38
1A1A6R13	B-37
1A1A6R14	B-37
1A1A6R15	B-38
1A1A6R17	B-38
1A1A6R18	B-38
1A1A6R31	B-38
1A1A6W1	B-35
1A1A6W1W1	B-35
1A1A6W1P30	B-36
1A1A6XV1	B-38
1A1A6XV2	B-38
1A2	B-123
1A2C2	B-124
1A2C3	B-123
1A2C4	B-124
1A2C5	B-124
1A2C6	B-124
1A2C7	B-125
1A2C8	B-125
1A2C9	B-126
1A2C10	B-125
1A2C11	B-123
1A2C12	B-125
1A2C13	B-125
1A2C14	B-124
1A2C15	B-125
1A2C16	B-125
1A2C17	B-126
1A2C18	B-125

REFERENCE DESIGNATION	PAGE NUMBER
1A2C19	B-123
1A2C20	B-125
1A2C21	B-125
1A2C22	B-124
1A2C23	B-125
1A2C24	B-125
1A2C25	B-126
1A2C26	B-125
1A2C27	B-123
1A2C28	B-124
1A2C29	B-125
1A2C30	B-125
1A2C31	B-126
1A2C32	B-124
1A2C33	B-125
1A2C34	B-124
1A2C35	B-124
1A2C36	B-124
1A2C37	B-126
1A2C38	B-124
1A2C39	B-124
1A2C41	B-126
1A2C42	B-124
1A2C43	B-126
1A2C44	B-156
1A2C45	B-124
1A2C46	B-124
1A2C47	B-126
1A2CR1	B-131
1A2CR2	B-131
1A2CR3	B-130
1A2CR4	B-131
1A2CR5	B-131
1A2CR6	B-131
1A2CR7	B-131
1A2CR8	B-131
1A2CR9	B-131
1A2CR10	B-131
1A2CR11	B-131
1A2CR12	B-131
1A2CR13	B-132
1A2CR14	B-132
1A2CR15	B-132
1A2CR16	B-132
1A2E81	B-132
1A2E83	B-132
1A2E84	B-132
1A2E85	B-132
1A2E86	B-132
1A2E87	B-132
1A2E88	B-132
1A2E89	B-132
1A2E90	B-132
1A2E91	B-132
1A2J43	B-126
1A2L1	B-126
1A2L2	B-126
1A2L3	B-126
1A2L4	B-126
1A2L5	B-126
1A2L6	B-126
1A2L7	B-126
1A2MP1	B-126
1A2Q1	B-132
1A2Q2	B-132
1A2Q3	B-132
1A2Q4	B-132
1A2Q5	B-133
1A2Q6	B-133
1A2Q7	B-133
1A2Q8	B-131
1A2Q9	B-133
1A2Q10	B-133
1A2Q11	B-133
1A2Q12	B-133
1A2Q13	B-133
1A2Q14	B-133
1A2Q15	B-133
1A2Q16	B-133
1A2Q17	B-133
1A2Q18	B-133
1A2Q19	B-133
1A2Q20	B-133
1A2R1	B-126
1A2R2	B-127
1A2R3	B-127
1A2R4	B-127
1A2R5	B-127
1A2R6	B-127
1A2R7	B-127
1A2R8	B-127
1A2R9	B-127
1A2R10	B-127
1A2R11	B-131
1A2R12	B-127
1A2R13	B-127
1A2R14	B-127
1A2R15	B-127
1A2R16	B-127
1A2R17	B-127
1A2R18	B-127
1A2R19	B-128
1A2R20	B-128
1A2R21	B-128
1A2R22	B-128
1A2R23	B-128
1A2R24	B-131
1A2R25	B-128
1A2R26	B-128
1A2R27	B-128
1A2R28	B-128
1A2R29	B-128
1A2R30	B-128
1A2R31	B-128
1A2R32	B-128
1A2R33	B-128
1A2R34	B-128
1A2R35	B-128
1A2R36	B-129
1A2R37	B-129
1A2R38	B-131
1A2R39	B-129
1A2R40	B-129
1A2R41	B-129
1A2R42	B-129
1A2R43	B-129
1A2R44	B-129
1A2R45	B-129
1A2R46	B-129
1A2R47	B-129
1A2R48	B-129
1A2R49	B-129
1A2R50	B-129
1A2R51	B-129
1A2R53	B-129
1A2R54	B-130
1A2R55	B-130
1A2R56	B-130
1A2R57	B-130
1A2R58	B-130
1A2R59	B-130
1A2R60	B-130
1A2R61	B-130
1A2R62	B-130
1A2R63	B-130
1A2R64	B-130
1A2R66	B-131
1A2R67	B-130
1A2R68	B-130
1A2R69	B-130
1A2R70	B-130
1A2R71	B-130
1A2R72	B-131
1A2T2	B-132
1A2T3	B-132
1A2T4	B-132
1A3	B-72
1A3C1	B-73
1A3C2	B-73
1A3C3	B-73
1A3C4	B-74
1A3C5	B-75
1A3C6	B-73
1A3C7	B-74
1A3C8	B-75
1A3C9	B-75
1A3C10	B-73
1A3C11	B-73
1A3C12	B-73
1A3C13	B-73
1A3C14	B-73
1A3C15	B-73
1A3C16	B-75
1A3C17	B-74
1A3C18	B-73
1A3C19	B-73
1A3C20	B-75
1A3C21	B-73
1A3C22	B-75
1A3C23	B-75
1A3C24	B-73
1A3C25	B-75
1A3C26	B-73
1A3C27	B-74
1A3C28	B-74
1A3C29	B-74
1A3C30	B-74
1A3C31	B-75
1A3C32	B-75
1A3C33	B-75
1A3C34	B-75
1A3C35	B-75
1A3C36	B-75
1A3C37	B-74
1A3C38	B-74
1A3C39	B-74
1A3C40	B-74
1A3C41	B-74

CROSS REFERENCE TO PAGE NUMBER (CONTINUED)

REFERENCE DESIGNATION	PAGE NUMBER
1A3C42	B-74
1A3C43	B-74
1A3C44	B-74
1A3C45	B-74
1A3C46	B-75
1A3C47	B-75
1A3CR1	B-80
1A3CR2	B-80
1A3CR3	B-80
1A3CR4	B-80
1A3E55	B-80
1A3E56	B-80
1A3E57	B-80
1A3E165	B-80
1A3E182	B-80
1A3E183	B-80
1A3E184	B-80
1A3FL1	B-76
1A3FL2	B-76
1A3FL3	B-76
1A3FL4	B-77
1A3FL5	B-77
1A3J33	B-76
1A3J34	B-76
1A3J35	B-76
1A3J36	B-76
1A3J42	B-76
1A3L1	B-76
1A3L2	B-76
1A3L3	B-26
1A3L4	B-26
1A3L5	B-26
1A3L6	B-76
1A3L7	B-76
1A3L8	B-76
1A3Q1	B-80
1A3Q2	B-80
1A3Q3	B-80
1A3Q4	B-80
1A3Q5	B-81
1A3Q6	B-81
1A3Q7	B-81
1A3Q8	B-81
1A3Q9	B-81
1A3R1	B-77
1A3R2	B-77
1A3R3	B-77
1A3R4	B-77
1A3R5	B-77
1A3R6	B-77
1A3R7	B-77
1A3R8	B-77
1A3R9	B-78
1A3R10	B-78
1A3R11	B-78
1A3R12	B-78
1A3R13	B-78
1A3R14	B-78
1A3R15	B-78
1A3R16	B-78
1A3R17	B-78
1A3R18	B-78
1A3R19	B-78
1A3R20	B-78
1A3R21	B-78
1A3R22	B-78
1A3R23	B-78
1A3R24	B-78
1A3R25	B-79
1A3R26	B-79
1A3R27	B-79
1A3R28	B-79
1A3R29	B-79
1A3R30	B-79
1A3R31	B-79
1A3R32	B-79
1A3R33	B-79
1A3R34	B-79
1A3R35	B-79
1A3R36	B-79
1A3R37	B-79
1A3R38	B-79
1A3R39	B-79
1A3R40	B-79
1A3R41	B-80
1A3R42	B-80
1A3R43	B-80
1A3T1	B-80
1A3T2	B-80
1A4	B-81
1A4C1	B-81
1A4C2	B-84
1A4C3	B-83
1A4C4	B-81
1A4C5	B-82
1A4C7	B-82
1A4C8	B-81
1A4C9	B-81
1A4C10	B-83
1A4C11	B-83
1A4C12	B-81
1A4C13	B-81
1A4C14	B-82
1A4C15	B-82
1A4C16	B-81
1A4C17	B-82
1A4C18	B-82
1A4C19	B-81
1A4C20	B-81
1A4C21	B-82
1A4C22	B-82
1A4C23	B-81
1A4C24	B-82
1A4C25	B-83
1A4C26	B-83
1A4C27	B-82
1A4C28	B-82
1A4C29	B-82
1A4C30	B-83
1A4C31	B-83
1A4C33	B-83
1A4C34	B-82
1A4C35	B-82
1A4C36	B-82
1A4C37	B-82
1A4CR1	B-87
1A4CR2	B-87
1A4CR3	B-87
1A4CR4	B-87
1A4CR5	B-87
1A4CR6	B-87
1A4CR7	B-87
1A4CR8	B-87
1A4CR9	B-87
1A4FL1	B-84
1A4FL2	B-84
1A4FL3	B-84
1A4J12	B-83
1A4J13	B-83
1A4J14	B-83
1A4J15	B-83
1A4J16	B-83
1A4J17	B-83
1A4L2	B-83
1A4P18	B-84
1A4Q1	B-87
1A4Q2	B-87
1A4Q3	B-87
1A4Q4	B-87
1A4Q5	B-82
1A4Q6	B-88
1A4Q7	B-88
1A4R1	B-84
1A4R2	B-84
1A4R3	B-84
1A4R4	B-84
1A4R5	B-84
1A4R6	B-84
1A4R7	B-85
1A4R8	B-85
1A4R9	B-85
1A4R10	B-85
1A4R11	B-85
1A4R12	B-85
1A4R14	B-85
1A4R16	B-85
1A4R17	B-85
1A4R18	B-85
1A4R19	B-87
1A4R20	B-85
1A4R21	B-85
1A4R22	B-85
1A4R23	B-85
1A4R24	B-86
1A4R25	B-86
1A4R26	B-86
1A4R27	B-86
1A4R28	B-86
1A4R29	B-86
1A4R30	B-86
1A4R31	B-86
1A4R32	B-86
1A4R33	B-86
1A4R34	B-86
1A4R36	B-86
1A4R37	B-86
1A4R38	B-86
1A4R39	B-86
1A4R40	B-86
1A4T1	B-87
1A4T2	B-87
1A4T3	B-87
1A4T4	B-87
1A4Y1	B-84
1A5	B-45

REFERENCE DESIGNATION	PAGE NUMBER
1A5C1	B-45
1A5C2	B-45
1A5C3	B-45
1A5CR1	B-46
1A5CR2	B-46
1A5H2	B-45
1A5K1	B-45
1A5L1	B-45
1A5L2	B-45
1A5MP1	B-45
1A5MP2	B-46
1A5MP3	B-46
1A5Q1	B-46
1A5R1	B-45
1A5R2	B-46
1A5R3	B-46
1A5R4	B-46
1A6	B-138
1A6C1	B-138
1A6C2	B-140
1A6C3	B-138
1A6C4	B-139
1A6C5	B-138
1A6C6	B-138
1A6C7	B-139
1A6C8	B-139
1A6C9	B-139
1A6C11	B-139
1A6C12	B-139
1A6C13	B-140
1A6C14	B-139
1A6C15	B-139
1A6C16	B-139
1A6C17	B-140
1A6C18	B-139
1A6C19	B-140
1A6C20	B-140
1A6C21	B-139
1A6C22	B-140
1A6C23	B-139
1A6C24	B-139
1A6C25	B-140
1A6C26	B-139
1A6C27	B-140
1A6C28	B-140
1A6C29	B-139
1A6C30	B-139
1A6CR1	B-89
1A6CR2	B-89
1A6CR3	B-89
1A6CR4	B-89
1A6CR5	B-89
1A6CR6	B-89
1A6CR7	B-89
1A6CR8	B-88
1A6CR9	B-89
1A6CR10	B-89
1A6CR11	B-89
1A6CR12	B-89
1A6CR13	B-89
1A6CR14	B-89
1A6CR15	B-89
1A6CR16	B-90
1A6E61	B-143
1A6E62	B-143
1A6E63	B-144
1A6E188	B-144
1A6E189	B-144
1A6E190	B-144
1A6FL1	B-141
1A6FL2	B-141
1A6H2	B-138
1A6H3	B-141
1A6J7	B-140
1A6J8	B-140
1A6J9	B-141
1A6J10	B-141
1A6J11	B-141
1A6L1	B-140
1A6L2	B-140
1A6L3	B-140
1A6L4	B-140
1A6L5	B-140
1A6L6	B-140
1A6MP1	B-141
1A6MP2	B-141
1A6MP3	B-141
1A6MP4	B-141
1A6Q1	B-144
1A6Q2	B-144
1A6Q3	B-144
1A6R1	B-142
1A6R2	B-141
1A6R3	B-141
1A6R4	B-141
1A6R5	B-141
1A6R6	B-142
1A6R7	B-142
1A6R8	B-142
1A6R9	B-142
1A6R10	B-142
1A6R11	B-142
1A6R12	B-142
1A6R13	B-142
1A6R14	B-142
1A6R15	B-142
1A6R16	B-142
1A6R17	B-142
1A6R18	B-142
1A6R19	B-142
1A6R20	B-142
1A6T1	B-144
1A6Y1	B-141
1A7	B-19
1A7C1	B-19
1A7C2	B-21
1A7C3	B-19
1A7C4	B-21
1A7C5	B-19
1A7C6	B-19
1A7C7	B-19
1A7C8	B-21
1A7C9	B-19
1A7C10	B-19
1A7C11	B-19
1A7C12	B-21
1A7C13	B-19
1A7C14	B-19
1A7C15	B-21
1A7C16	B-19
1A7C17	B-20
1A7C18	B-20
1A7C19	B-20
1A7C20	B-20
1A7C21	B-20
1A7C22	B-20
1A7C23	B-21
1A7C24	B-20
1A7C25	B-20
1A7C26	B-20
1A7C27	B-21
1A7C28	B-20
1A7C29	B-21
1A7C30	B-20
1A7C31	B-20
1A7C33	B-21
1A7C34	B-21
1A7C35	B-21
1A7C36	B-20
1A7C37	B-20
1A7C38	B-20
1A7C39	B-21
1A7C40	B-20
1A7CR1	B-25
1A7CR2	B-25
1A7CR3	B-25
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1A7CR5	B-25
1A7CR6	B-25
1A7CR7	B-25
1A7E167	B-25
1A7J20	B-22
1A7J22	B-22
1A7K1	B-22
1A7L1	B-21
1A7L2	B-21
1A7L3	B-21
1A7L4	B-21
1A7L5	B-22
1A7MP1	B-22
1A7Q1	B-26
1A7Q2	B-26
1A7Q3	B-26
1A7Q4	B-26
1A7Q5	B-26
1A7Q6	B-26
1A7Q7	B-26
1A7Q8	B-26
1A7Q9	B-26
1A7Q10	B-26
1A7R1	B-22
1A7R2	B-22
1A7R3	B-22
1A7R4	B-22
1A7R5	B-22
1A7R6	B-22
1A7R7	B-22
1A7R8	B-22
1A7R9	B-22
1A7R10	B-22
1A7R11	B-22
1A7R12	B-22
1A7R13	B-23
1A7R14	B-23
1A7R15	B-23
1A7R16	B-23
1A7R17	B-23
1A7R18	B-23

REFERENCE DESIGNATION	PAGE NUMBER
1A7R19	B-23
1A7R20	B-23
1A7R21	B-23
1A7R22	B-23
1A7R23	B-23
1A7R24	B-23
1A7R25	B-23
1A7R26	B-23
1A7R27	B-23
1A7R28	B-23
1A7R29	B-24
1A7R30	B-24
1A7R31	B-24
1A7R32	B-24
1A7R33	B-24
1A7R34	B-24
1A7R35	B-25
1A7R36	B-24
1A7R37	B-24
1A7R38	B-24
1A7R39	B-25
1A7R40	B-24
1A7R41	B-24
1A7R43	B-24
1A7R44	B-24
1A7R45	B-24
1A7R46	B-24
1A7R47	B-25
1A7R48	B-25
1A7R49	B-25
1A7R50	B-25
1A7R51	B-25
1A7T1	B-25
1A7T2	B-25
1A7T3	B-26
1A7T4	B-26
1A7T5	B-26
1A7T6	B-26
1A7T7	B-26
1A8	B-88
1A8C19	B-88
1A8C20	B-88
1A8C21	B-90
1A8C22	B-88
1A8C23	B-89
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1A8C66	B-89
1A8C67	B-90
1A8C68	B-89
1A8C69	B-89
1A8CR2	B-94
1A8CR3	B-94
1A8CR4	B-94
1A8CR5	B-94
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1A8CR13	B-95
1A8CR14	B-95
1A8J24	B-91
1A8J25	B-91
1A8L2	B-90
1A8L4	B-95
1A8P23	B-91
1A8Q3	B-95
1A8Q4	B-95
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1A8Q9	B-96
1A8Q10	B-96
1A8R1	B-91
1A8R17	B-91
1A8R18	B-91
1A8R19	B-91
1A8R20	B-91
1A8R21	B-91
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1A8R30	B-94
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1A8R32	B-92
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1A8R37	B-92
1A8R38	B-92
1A8R39	B-92
1A8R40	B-92
1A8R41	B-93
1A8R42	B-92
1A8R43	B-92
1A8R44	B-93
1A8R45	B-93
1A8R46	B-93
1A8R47	B-93
1A8R48	B-93
1A8R50	B-92
1A8R51	B-93
1A8R52	B-93
1A8R53	B-93
1A8R54	B-93
1A8R55	B-93
1A8R56	B-94
1A8R57	B-94
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1A8R61	B-94
1A8R62	B-94
1A8R63	B-94
1A8R64	B-94
1A8R65	B-94
1A8R67	B-93
1A8R68	B-93
1A8R69	B-93
1A8R70	B-93
1A8R71	B-93
1A8T3	B-95
1A8T5	B-95
1A8T6	B-95
1A8T7	B-95
1A8T8	B-95
1A9	B-96
1A9C1	B-97
1A9C2	B-96
1A9C3	B-96
1A9C4	B-96
1A9C5	B-96
1A9C6	B-96
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1A9C9	B-96
1A9C10	B-96
1A9C11	B-96
1A9C12	B-96
1A9CR1	B-98
1A9J40	B-97
1A9L1	B-97
1A9L2	B-98
1A9Q1	B-98
1A9Q2	B-98
1A9Q3	B-98
1A9Q4	B-98
1A9R1	B-97
1A9R2	B-97
1A9R3	B-97
1A9R4	B-97
1A9R5	B-97
1A9R6	B-97
1A9R7	B-98
1A9R8	B-97
1A9R9	B-97
1A9R10	B-97

CROSS REFERENCE TO PAGE NUMBER (CONTINUED)

REFERENCE DESIGNATION	PAGE NUMBER
1A9R11	B-97
1A9R12	B-97
1A9R13	B-97
1A9R14	B-98
1A9R15	B-97
1A9R16	B-98
1A9R17	B-98
1A9R18	B-98
1A9T1	B-98
1A10	B-98
1A10C1	B-99
1A10C2	B-99
1A10C3	B-99
1A10C4	B-99
1A10C5	B-99
1A10C6	B-99
1A10C7	B-99
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1A10C10	B-99
1A10C11	B-99
1A10C12	B-99
1A10C13	B-99
1A10E8	B-101
1A10E9	B-102
1A10E10	B-102
1A10E11	B-102
1A10E12	B-102
1A10E13	B-102
1A10L1	B-99
1A10L2	B-99
1A10Q1	B-102
1A10Q2	B-102
1A10R1	B-100
1A10R2	B-100
1A10R3	B-101
1A10R4	B-101
1A10R5	B-101
1A10R6	B-101
1A10R7	B-101
1A10R8	B-101
1A10R9	B-101
1A10R10	B-101
1A10R11	B-101
1A10Y1	B-99
1A10Y2	B-99
1A10Y3	B-100
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1A10Y10	B-100
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1A10Y12	B-100
1A10Y13	B-100
1A11	B-102
1A11C1	B-102
1A11C2	B-102
1A11C3	B-102
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1A11C7	B-102
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1A11C10	B-102
1A11E18	B-105
1A11E19	B-105
1A11E20	B-105
1A11E21	B-105
1A11E22	B-105
1A11E23	B-105
1A11L1	B-103
1A11L2	B-103
1A11Q1	B-105
1A11Q2	B-105
1A11R1	B-104
1A11R2	B-104
1A11R3	B-104
1A11R4	B-104
1A11R5	B-104
1A11R6	B-104
1A11R7	B-104
1A11R8	B-104
1A11R9	B-104
1A11R10	B-104
1A11R11	B-104
1A11S1	B-105
1A11Y1	B-103
1A11Y2	B-103
1A11Y3	B-103
1A11Y4	B-103
1A11Y5	B-103
1A11Y6	B-103
1A11Y7	B-103
1A11Y8	B-103
1A11Y9	B-103
1A11Y10	B-103
1A12	B-105
1A12C1	B-105
1A12C2	B-105
1A12C5	B-105
1A12C6	B-105
1A12C7	B-105
1A12C8	B-105
1A12E20	B-107
1A12E31	B-107
1A12E32	B-107
1A12E33	B-108
1A12E34	B-108
1A12E35	B-108
1A12L1	B-105
1A12L2	B-105
1A12L3	B-106
1A12Q2	B-108
1A12R1	B-106
1A12R2	B-106
1A12R3	B-107
1A12R4	B-107
1A12R5	B-107
1A12R6	B-107
1A12R7	B-107
1A12R8	B-107
1A12R9	B-107
1A12S1	B-107
1A12Y1	B-106
1A12Y2	B-106
1A12Y3	B-106
1A12Y4	B-106
1A12Y5	B-106
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1A12Y10	B-106
1A13	B-108
1A13C1	B-108
1A13C2	B-108
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1A13C6	B-108
1A13C7	B-108
1A13E42	B-110
1A13E43	B-111
1A13E44	B-111
1A13E45	B-111
1A13E46	B-111
1A13E47	B-111
1A13L1	B-108
1A13L2	B-108
1A13L3	B-109
1A13Q1	B-111
1A13Q2	B-111
1A13R1	B-110
1A13R2	B-110
1A13R3	B-110
1A13R4	B-110
1A13R5	B-110
1A13R6	B-110
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1A13Y1	B-109
1A13Y2	B-109
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1A13Y6	B-109
1A13Y7	B-109
1A13Y8	B-109
1A13Y9	B-109
1A13Y10	B-109
1A14	B-46
1A14C1	B-46
1A14C2	B-47
1A14C4	B-46
1A14C5	B-46
1A14C6, 1A14C7	B-47
1A14CR1	B-47
1A14H2	B-46
1A14MP1	B-46
1A14MP2	B-47
1A14P24	B-47
1A14Q1	B-47
1A14Q2	B-47
1A14R1	B-47
1A14R2	B-47
1A14R3	B-47
1A14R4	B-47
1A14R5	B-47
1A14R6	B-47
1A14R7	B-47
1A14R8	B-47
1A14T1	B-47
1A15	B-48
1A15C1	B-48

CROSS REFERENCE TO PAGE NUMBER (CONTINUED)

REFERENCE DESIGNATION	PAGE NUMBER
1A15C2	B-48
1A15C3	B-48
1A15CR1	B-49
1A15H1	B-48
1A15H2	B-48
1A15MP1	B-49
1A15P28	B-48
1A15Q1	B-49
1A15Q2	B-49
1A15R1	B-48
1A15R2	B-48
1A15R3	B-48
1A15R4	B-48
1A15R5	B-48
1A15R6	B-48
1A15R7	B-48
1A15R8	B-48
1A15R9	B-48
1A16	B-17
1A16C1	B-17
1A16C2	B-17
1A16C3	B-17
1A16C4	B-17
1A16C5	B-17
1A16CR1	B-18
1A16P26	B-17
1A16Q1	B-18
1A16Q2	B-18
1A16Q3	B-18
1A16Q4	B-18
1A16Q5	B-18
1A16Q6	B-19
1A16R1	B-18
1A16R2	B-18
1A16R3	B-18
1A16R4	B-18
1A16R5	B-18
1A16R6	B-18
1A16R7	B-18
1A16R8	B-18
1A16R9	B-18
1A16R10	B-18
1A17	B-111
1A19	B-63
1A19FL5	B-64
1A19FL6	B-64
1A19C41	B-64
1A19C42	B-64
1A19C43	B-64
1A19C44	B-64
1A19C45	B-64
1A19C46	B-64
1A19C47	B-64
1A19C48	B-64
1A20	B-113
1A20C9	B-113
1A20C10	B-113
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1A20CR23	B-114
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1A20J37	B-114
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1A20Q1	B-115
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1A20R4	B-114
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1A21C69	B-56
1A21C70	B-56
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1A22C53	B-72
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1A22C55	B-72
1A23	B-61
1A23B1	B-62
1A23C38	B-61
1A23P38	B-62
2C13	B-6
2C14	B-6
2C15	B-6
2C16	B-7
2A1	B-12
2A1C1	B-13
2A1C2	B-13
2A1C3	B-12
2A1C4	B-12
2A1C5	B-12
2A1C6	B-12
2A1CR1	B-13
2A1CR2	B-13
2A1J1	B-13
2A1J3	B-14
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12E4	B-155
12E5	B-155

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1A19C45	B-64
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11A2C2	B-153
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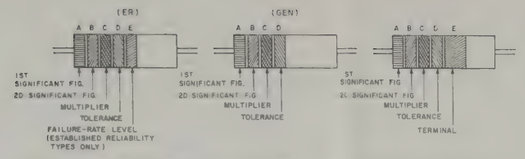


COLOR CODE MARKING FOR COMPOSITION TYPE RESISTORS

COLOR-CODE MARKING FOR FILM-TYPE RESISTORS

TABLE I
COLOR CODE FOR COMPOSITION TYPE AND FILM TYPE RESISTORS.

BAND A		BAND B		BAND C		BAND D		BAND E		
COLOR	FIRST SIGNIFICANT FIGURE	COLOR	SECOND SIGNIFICANT FIGURE	COLOR	MULTIPLIER	COLOR	RESISTANCE TOLERANCE (PERCENT)	COLOR	FAILURE RATE LEVEL	TERM
BLACK	0	BLACK	0	BLACK	1			BROWN	M	
BROWN	1	BROWN	1	BROWN	10			RED	P	
RED	2	RED	2	RED	100			ORANGE	R	
ORANGE	3	ORANGE	3	ORANGE	1,000			YELLOW	S	
YELLOW	4	YELLOW	4	YELLOW	10,000	SILVER	±10 (COMP. TYPE ONLY)	WHITE		SOLDERABLE
GREEN	5	GREEN	5	GREEN	100,000	GOLD	±5			
BLUE	6	BLUE	6	BLUE	1,000,000	RED	±2 (NOT APPLICABLE TO ESTABLISHED RELIABILITY).			
PURPLE (VIOLET)	7	PURPLE (VIOLET)	7							
GRAY	8	GRAY	8	SILVER	0.01					
WHITE	9	WHITE	9	GOLD	0.1					

BAND A — THE FIRST SIGNIFICANT FIGURE OF THE RESISTANCE VALUE (BANDS A THRU D SHALL BE OF EQUAL WIDTH.)

BAND B — THE SECOND SIGNIFICANT FIGURE OF THE RESISTANCE VALUE

BAND C — THE MULTIPLIER (THE MULTIPLIER IS THE FACTOR BY WHICH THE TWO SIGNIFICANT FIGURES ARE MULTIPLIED TO YIELD THE NOMINAL RESISTANCE VALUE.)

BAND D — THE RESISTANCE TOLERANCE

BAND E — WHEN USED ON COMPOSITION RESISTORS, BAND E INDICATES ESTABLISHED RELIABILITY FAILURE-RATE LEVEL. ON FILM RESISTORS, THIS BAND SHALL BE APPROXIMATELY 1-1/2 TIMES THE WIDTH OF OTHER BANDS, AND INDICATES TYPE OF TERMINAL.

RESISTANCES IDENTIFIED BY NUMBERS AND LETTERS (THESE ARE NOT COLOR CODED.)

SOME RESISTORS ARE IDENTIFIED BY THREE OR FOUR DIGIT ALPHA NUMERIC DESIGNATORS. THE LETTER R IS USED IN PLACE OF A DECIMAL POINT WHEN FRACTIONAL VALUES OF AN OHM ARE EXPRESSED. FOR EXAMPLE:

2R7 = 2.7 OHMS 10R0 = 10.0 OHMS

FOR WIRE-WOUND-TYPE RESISTORS COLOR CODING IS NOT USED. IDENTIFICATION MARKING IS SPECIFIED IN EACH OF THE APPLICABLE SPECIFICATIONS.

EXAMPLES OF COLOR CODING

NOMINAL RESISTANCE 3,900 OHMS
RESISTANCE TOLERANCE ±5%
FAILURE RATE LEVEL M

NOMINAL RESISTANCE 1,400 OHMS
RESISTANCE TOLERANCE ±10%

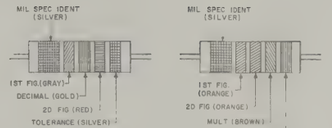
NOMINAL RESISTANCE 3,400 OHMS
RESISTANCE TOLERANCE ±5%
TERMINAL SOLDERABLE

COMPOSITION-TYPE RESISTORS

FILM-TYPE RESISTORS

* IF BAND D IS OMITTED, THE RESISTOR TOLERANCE IS ±20% AND THE RESISTOR IS NOT MIL-STD.

A. COLOR CODE MARKING FOR MILITARY STANDARD RESISTORS.



(A) 8.2UH ± 10%

(B) 330UH ± 5%

COLOR CODING FOR TUBULAR ENCAPSULATED R F CHOKES. AT A, AN EXAMPLE OF THE CODING FOR AN 8.2UH CHOKE IS GIVEN. AT B, THE COLOR BANDS FOR A 330UH INDUCTOR ARE ILLUSTRATED

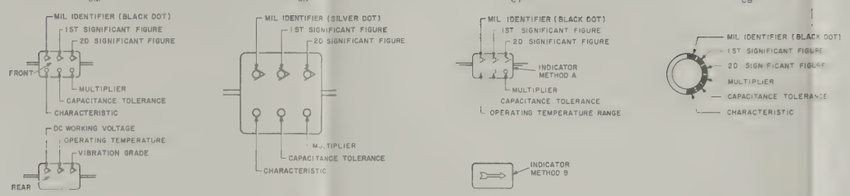
TABLE 2
COLOR CODING FOR TUBULAR ENCAPSULATED R F CHOKES

COLOR	SIGNIFICANT FIGURE	MULTIPLIER	INDUCTANCE TOLERANCE (PERCENT)
BLACK	0		
BROWN	1	10	
RED	2	100	2
ORANGE	3	1,000	3
YELLOW	4		
GREEN	5		
BLUE	6		
VIOLET	7		
GRAY	8		
WHITE	9		
NONE			20
SILVER			10
GOLD	DECIMAL POINT		5

MULTIPLIER IS THE FACTOR BY WHICH THE TWO COLOR FIGURES ARE MULTIPLIED TO OBTAIN THE INDUCTANCE VALUE OF THE CHOKE COIL.

B. COLOR CODE MARKING FOR MILITARY STANDARD INDUCTORS.

CAPACITORS, FIXED, VARIOUS-DIELECTRICS, STYLES CM, CN, CY, AND CB.

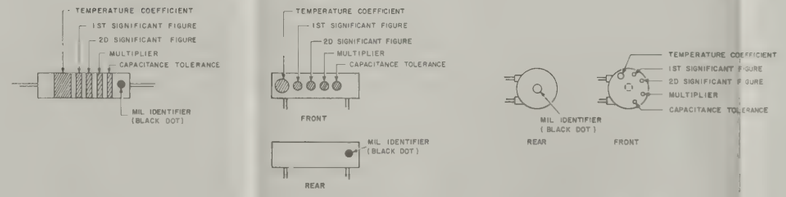


MICA-DIELECTRIC

PAPER-DIELECTRIC

GLASS-DIELECTRIC, GLASS CASE

MICA, BUTTON TYPE



AXIAL LEAD

RADIAL LEAD

DISK-TYPE

C. COLOR CODE MARKING FOR MILITARY STANDARD CAPACITORS.

TABLE 3 — FOR USE WITH STYLES CM, CN, CY AND CB.

COLOR	MIL ID	1ST SIG FIG.	2D SIG FIG.	MULTIPLIER	CAPACITANCE TOLERANCE CHARACTERISTIC						DC WORKING VOLTAGE	OPERATING TEMP. RANGE	VIBRATION GRADE
					CM	CN	CY	CB	CM	CN	CB				
BLACK	CM, CY, CB	0	0	1			±20%	±20%		A			−55°TO+70°C	10-55 HZ
BROWN		1	1	10					B	E	B			
RED		2	2	100	±2%		±2%	±2%	C				−55°TO+85°C	
ORANGE		3	3	1000		±30%			D		D	300		
YELLOW		4	4	10000					E				−55°TO+125°C	10-2,000HZ
GREEN		5	5		±5%				F			500		
BLUE		6	6										−55°TO+150°C	
PURPLE (VIOLET)		7	7											
GREY		8	8											
WHITE		9	9											
GOLD				0			±5%	±5%						
SILVER	CN				±10%	±20%	±10%	±10%						

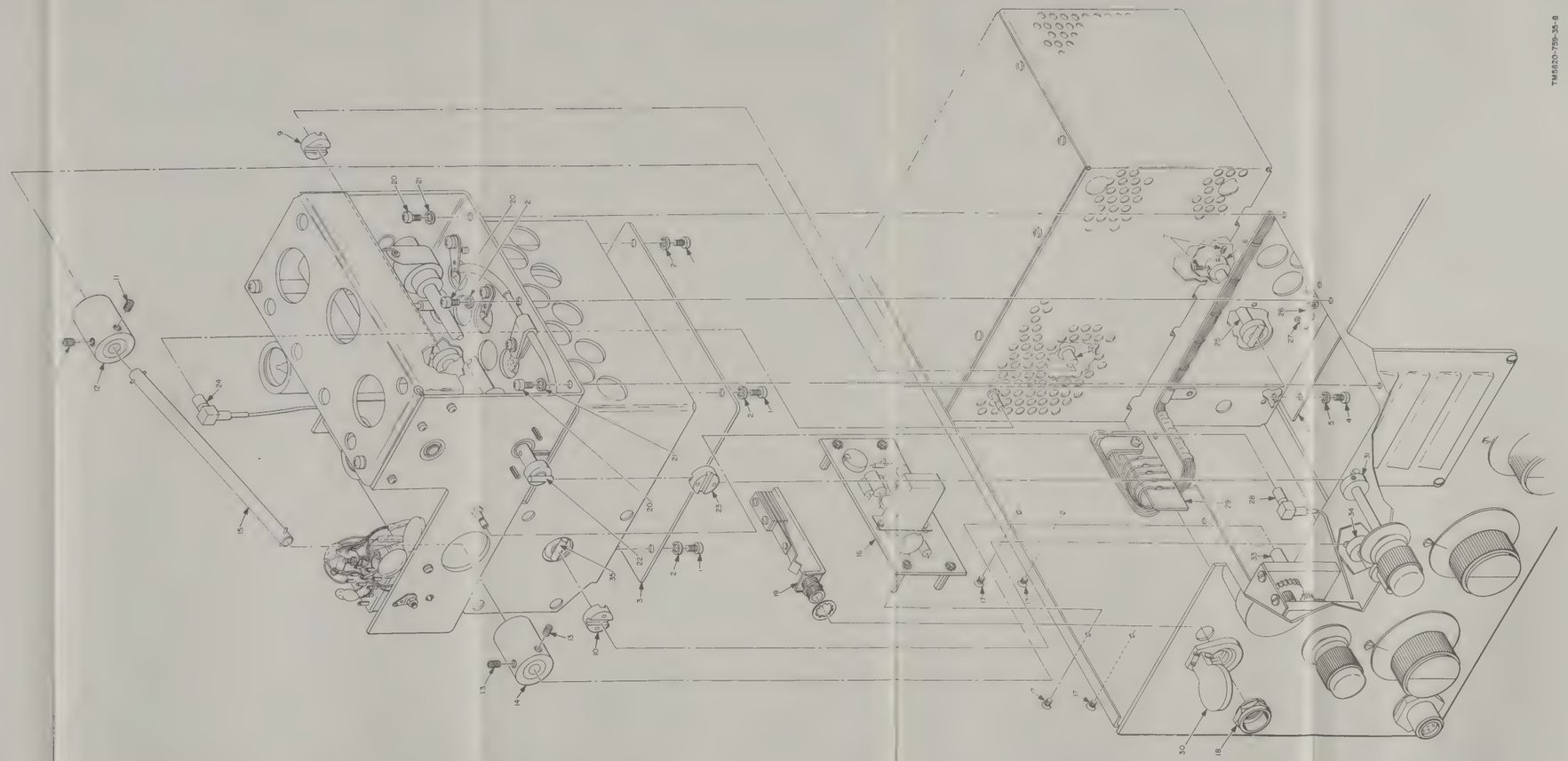
TABLE 4 — TEMPERATURE COMPENSATING, STYLE CC.

COLOR	TEMPERATURE COEFFICIENT[4]	1ST SIG FIG	2D SIG FIG	MULTIPLIER[1]	CAPACITANCE TOLERANCE		MIL ID
					CAPACITANCES OVER 10 UUF	CAPACITANCES 10 UUF OR LESS	
BLACK	0	0	0	1	±2%	±20 UUF	CC
BROWN	-30			10	±1%		
RED	-80	2	2	100	±2%	±0.25 UUF	
ORANGE	-150	3	3	1,000			
YELLOW	-220	4	4				
GREEN	-330	5	5		±5%	±0.5 UUF	
BLUE	-470	6	6				
PURPLE (VIOLET)	-750	7	7				
GREY		8	8	0.01			
WHITE		9	9	0	±0%		
GOLD	+100					±1.0 UUF	
SILVER							

1. THE MULTIPLIER IS THE NUMBER BY WHICH THE TWO SIGNIFICANT (SIG) FIGURES ARE MULTIPLIED TO OBTAIN THE CAPACITANCE IN UUF.
2. LETTERS INDICATE THE CHARACTERISTICS DESIGNATED IN APPLICABLE SPECIFICATIONS: MIL-C-5, MIL-C-25D, MIL-C-11272B, AND MIL-C-10950C RESPECTIVELY
3. LETTERS INDICATE THE TEMPERATURE RANGE AND VOLTAGE-TEMPERATURE LIMITS DESIGNATED IN MIL-C-11015D
4. TEMPERATURE COEFFICIENT IN PARTS PER MILLION PER DEGREE CENTIGRADE.

ESC-FM 4113-69

Figure 6-9. Color code markings for MIL-STD capacitors, inductors, and resistors.



1 Screw
2 Lockwasher
3 Plate
4 Screw
5 Lockwasher
6 Cover
7 Setscrew
8 Shaft collar
9 Flexible shaft coupling
10 Flexible shaft coupling
11 Setscrew
12 Rigid shaft coupling
13 Setscrew
14 Rigid shaft coupling
15 Shaft
16 Limiter 1A5
17 Screw
18 Nut
19 Headphone jack
20 Screw
21 Lockwasher
22 Rigid shaft coupling
23 Flexible shaft coupling
24 Connector
25 Shaft
26 Ground lug
27 Feedthrough
28 Connector
29 Connector
30 Headphone jack cover
31 Rigid shaft coupling
32 Shaft
33 Shaft
34 Rigid shaft coupling
35 Rigid shaft coupling

Figure 6-10. Rf Amplifier 1A1 removal.

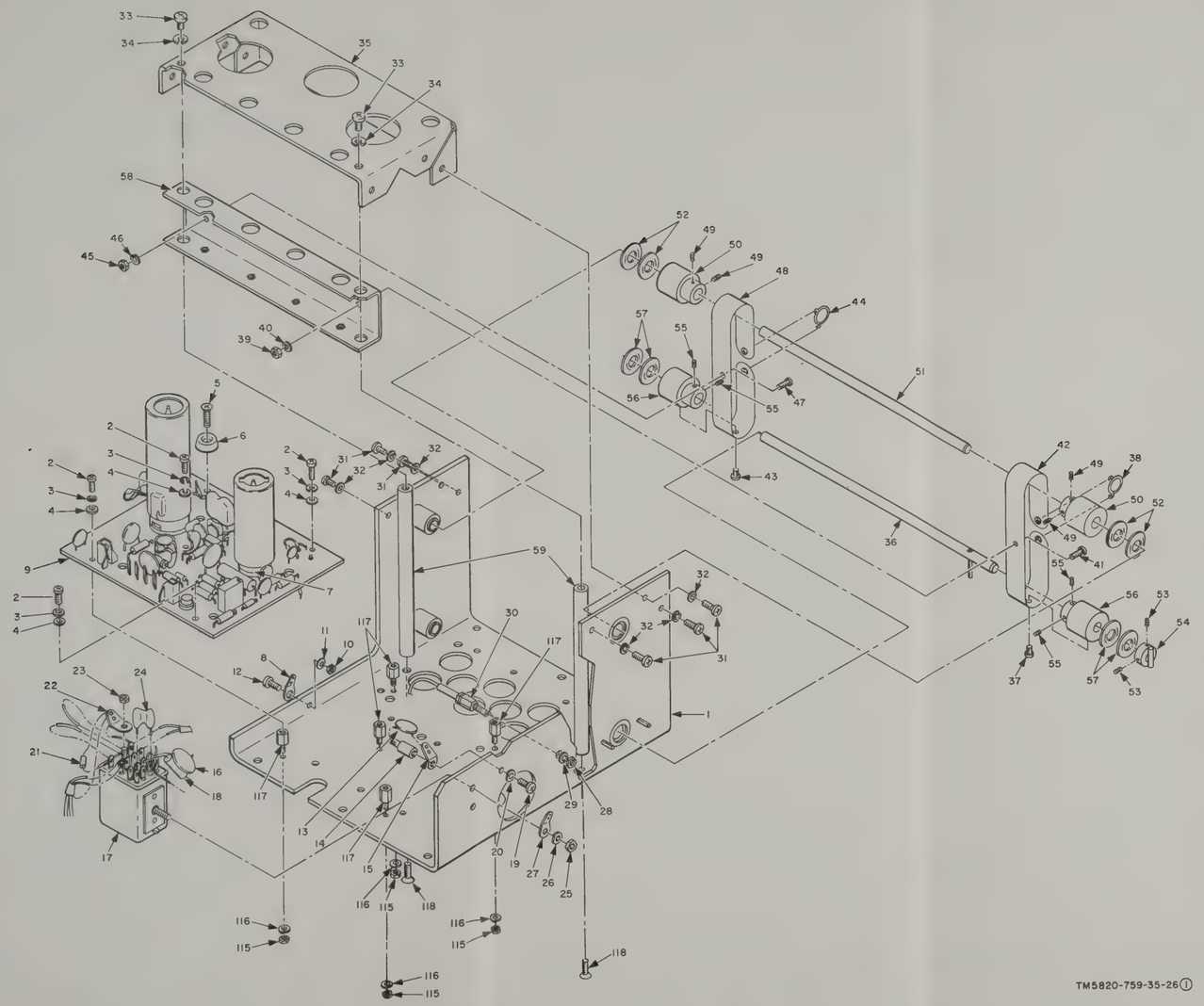


Figure 6-11①. Rf amplifier 1A1 exploded view.

1 Chassis
2 Screw
3 Lockwasher
4 Flatwasher
5 Screw
6 Nonmetallic washer
7 XVI socket
8 Terminal lug
9 Amplifier subassembly 1A1A6
10 Nut
11 Lockwasher
12 Screw
13 Capacitor
14 Terminal
15 Terminal lug
16 Capacitor
17 Relay
18 Coil
19 Screw
20 Lockwasher
21 Diode
22 Terminal lug
23 Nut
24 Capacitor
25 Nut
26 Lockwasher
27 Terminal lug
28 Nut
29 Lockwasher
30 Connector
31 Screw
32 Lockwasher
33 Screw
34 Lockwasher
35 Cover
36 Shaft
37 Screw
38 Spring clip
39 Nut
40 Lockwasher
41 Screw
42 Flat belt
43 Screw
44 Spring clip
45 Nut
46 Lockwasher
47 Screw
48 Flat belt
49 Setscrew
50 Sleeve bearing
51 Shaft
52 Spring washer
53 Setscrew
54 Rigid shaft coupling
55 Setscrew
56 Sleeve bearing
57 Spring washer
58 Bracket
59 Sleeve spacer
115 Nut
116 Lockwasher
117 Sleeve spacer
118 Screw

Callouts 60 through 114 are located on figure 6-11(2)

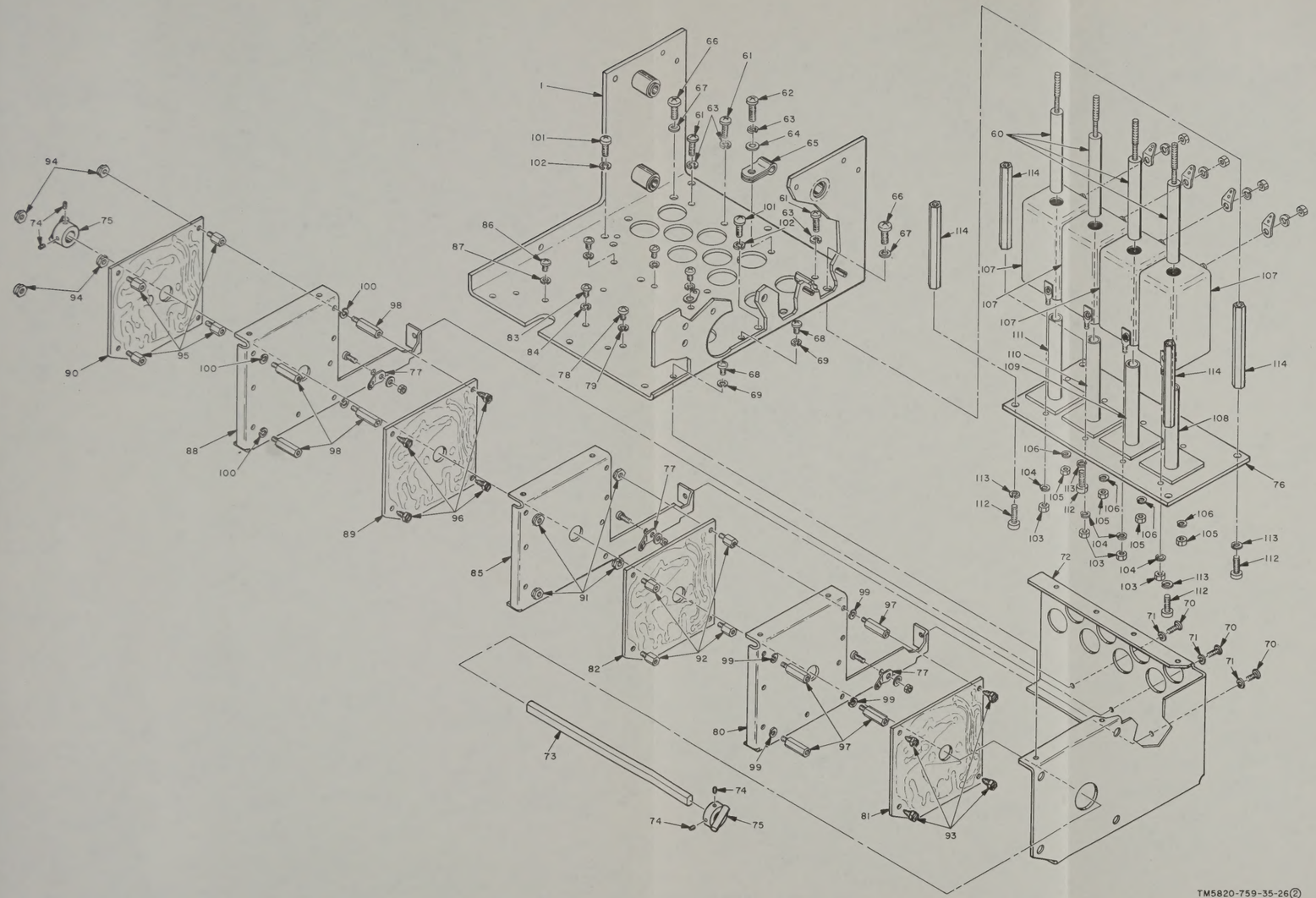


Figure 6-11②. Rf amplifier 1A1 exploded view.

60 Tuning core
61 Screw
62 Screw
63 Lockwasher
64 Flatwasher
65 Loop clamp
66 Screw
67 Lockwasher
68 Screw
69 Lockwasher
70 Screw
71 Lockwasher
72 Bracket
73 Shaft
74 Setscrew
75 Rigid shaft coupling
76 Amplifier subassembly 1A1A5
77 Terminal lug
78 Screw
79 Lockwasher
80 Bracket
81 Amplifier subassembly 1A1A1
82 Amplifier subassembly 1A1A2
83 Screw
84 Lockwasher
85 Bracket
86 Screw
87 Lockwasher
88 Bracket
89 Amplifier subassembly 1A1A3
90 Amplifier subassembly 1A1A4
91 Nut
92 Sleeve spacer
93 Screw
94 Nut
95 Sleeve spacer
96 Screw
97 Sleeve spacer
98 Sleeve spacer
99 Lockwasher
100 Lockwasher
101 Screw
103 Nut
104 Lockwasher
105 Nut
106 Lockwasher
107 Can
108 Transformer 1A1A5L1
109 Transformer 1A1A5L2
110 Transformer 1A1A5L3
111 Transformer 1A1A5L4
112 Screw
113 Lockwasher
114 Sleeve spacer